

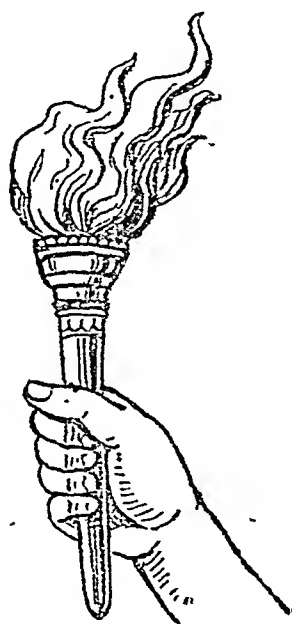
THE EDUCATIONAL CONFERENCE NUMBER

VOL. III

No. 1

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR:  
D. P. KHATTRY



JANUARY, 1938

ALL-INDIA FEDERATION OF  
EDUCATIONAL ASSOCIATIONS

POST-BOX 52, CAWNPORE

PRICE ANNAS EIGHT

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## Editors' Note

The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments, (d) articles containing statistics and their application to the solution of educational problems, (e) short notices of original works, (f) news of interest to educational workers

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### OTHER MAPS

Map of India, Urdu, Political	Map of North America, Hindi.
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Urdu Chart and Hindi Chart showing simple letters in thick type.  
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Map of Dehra Dun District, Urdu and Hindi (combined).

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**Educational Publishers**

**LAHORE AND ALLAHABAD**

# The Indian Journal of Education

(Edited and Published by the All India Federation of Educational Associations, Post Box 52, Cawnpore)

## OBJECTS

- (1) To act as an information Centre for all matters relating to Indian Education
- (2) To encourage scientific investigation in educational sphere and to stimulate statistical enquiries or those relating to experimental projects
- (3) To consolidate a public of those who, finding it impossible to be indifferent about the educational drift of India believe that a concern for the health of educational criticism is immediately relevant to the political and economic urgencies of the time
- (4) To provide a mouthpiece for Indian educational thinkers and researchers
- (5) To strive for World Peace through Education

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## ADVERTISEMENT

Ordinary advertisement charges for single insertion are as follows —

Full page Rs 15/-, Half page Rs 8/-; Quarter page Rs. 4/8/-  
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All communications should be addressed to

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*Vice-Chancellor, Andhra University*

# Indian Journal of Education

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Vol. III

JANUARY 1938

No. 1

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## A CRITICISM OF THE CRITICS OF EDUCATIONAL SYSTEM IN INDIA

BY

C. R. REDDI, M.A. (Cantab.), Bar-at-Law, M.L.A.,  
*Vice-Chancellor, Andhra University.*

*(Extracts from the Presidential Address of the Thirteenth  
All-India Educational Conference delivered at  
Calcutta on December 27, 1937.)*

Criticism against the present system of education is abroad as it has always been in the past. To-day; in some places it is blowing as a gentle breeze whereas in some parts of the country it is assuming the dimensions of a storm. I do not know whether it is going to uproot anything. But I believe that after the first few shocks are over things will be found not very different from what they have been till now, and even they may be better in some respects. It is one thing to advocate reforms, big reforms and it is another thing to cry down the very spirit and the very soul of a system of education. I wonder whether there is any system of education which is absolutely free from all defects. What I wish to emphasise is that educationists should welcome criticism pointing to the defects of the process and the achievements. All these must be taken to heart in the right spirit and one must try to improve since education like life is a matter of growth. But they must not rush to accept any and every remedy suggested by those who propose to inaugurate an entirely new era in society.

The great principle of life is that either we grow or we decay. That applies also to education. Stagnation means decay or death. And therefore we should welcome these criticisms and try to improve things in the light of these criticisms. But we find one thing—people going about consciously or unconsciously, spreading the idea that everything that has been done up-till now, is all rotten, all bad or evil, and that a new departure has to be made, an entirely new system has to be established. But what exactly do they mean when they say that the system of education has been a failure? There is no reason to be satisfied with the existing system of education but that should not be the sole ground for accepting any and every remedy suggested.

To say that an educational system is a failure is at best a partial truth and generally speaking, worse than an untruth. On analysis it will mean that society itself is a failure and not its educational organisation, which is one amongst many factors that mould the character of the younger generations. It cannot be that the home and parental influence, the influence of society, culture, tradition, historical conditions, public life are all perfect and progressive and that only education is a failure. In such circumstances even a bad system of education will not result in miserable products because the products will be the handiwork of the society as a whole. And when the society is strong and vigorous the younger generation also will be strong and vigorous. Do our critics mean that in the Hindu society for instance, all these other influences that I have referred to above are healthy and good, and because educational system is bad there has resulted, as one of my friends deplored just now, a youth without character and a people who are not real men and women. The proposition is only to be stated for its absurdity to become transparent.

It was in 1870, that compulsory elementary education was introduced in England but the English race was a mighty power on earth long before 1870. That has got to be considered by the critics. Education is not magic. It is no use blaming it if it does not transform lead into gold in enormous quantities and with amazing speed. It is one of the many factors including historical forces and conditions that shape a people's character and destiny. It is not the sole, all-sufficing factor, which would be

held responsible for every defect in the nation. For instance, if in your homes and parental calculations you set a high value on dowries can you blame the professor of English literature, who expounds to his students all the romantic novels and poetry of the West, that he fails to convert our young men and women into romantics of the western model instead of so many dowryseekers of our native pattern?

As regards the Wardha Educational Scheme formulated by Mahatma Gandhi it contains four essential points, namely: (1) withdrawal of state support from University and higher education; (2) leaving Universities and technological institutions to be organised by private corporations or the industrial firms concerned; (3) making elementary education up to the age of 14 compulsory and universal, and in order to find the finances and teachers necessary to give it a directly industrial basic turn so that salable commodities could be produced and thus education be made self-supporting; and (4) to conscript educated men and women so that they might serve as teachers for a stipulated period. It must be said that the scheme is splendid as a whole. Who can deny admiration for the wonderful way in which all the parts are combined into a harmonious whole. Mahatma Gandhi is by no means a fanatic about his ideas like most other people. He does not only invite criticism but encourages them. Whatever may be the defects of the scheme it cannot be denied that it has been produced by one of the most dynamic personalities of the world. When Mahatma Gandhi invited my opinion as to the Wardha Scheme I pointed out to him that he was going to transplant "Ashrama" education in the place of the system of education set up by the modern civilised world. I am glad to note that the scheme has in a large measure been modified to suit modern conditions as a result of criticism advanced by the educationists. It is true that Plato's "Republic" or Moore's "Utopia" cannot be adopted in practical life. But who could deny the contribution they had made to human progress? In the report of the Committee it has been clearly pointed out that the formation of a non-violent, and non-aggressive society was to be the ideal of education. People may ask themselves if such a society was possible. All historical developments, it has got to be remembered, have tended towards the increase of the strength of the society. To

become strong has been the aim in every society. Consciously or unconsciously, production of power or development of strength has been the motive of all civilisation. Ideally it is no doubt very good but how are people going to create a non-violent society? If desires are not limited, if men want to enjoy in an inordinate measure, if wants are not minimised naturally, there can be no non-violent society. If men minimise their wants, if their wants are satisfied easily, if they are to produce only what they can consume naturally, there can be no motive for aggression or competition which is prevalent in every sphere to-day. Throughout the original scheme there has been talk of doing away with sciences and applied sciences. In fact exploitation to day of one by another is carried through sciences. But the applied science can be made fruitful in another way, by employing it to the development of men, now being used for purposes of aggression and destruction. If these can be put into practice, a new age will be introduced putting an end to all violence and aggression. It may be that some of the advocates of the schemes may be able to introduce this new development in the world. For prophets came not to accept existing conditions but to create something new.

As regards university education, it is argued in some quarters that the country is poor and that they must concentrate on primary education, and therefore they cannot afford university education. One of the best ways in which the poverty of the country can be tackled is by means of new researches. University education and all higher technological education or researches have got to be financed by the State. It is a mistake to think that primary education is the concern of everybody and the university education is the concern of nobody. By stopping university education we may not increase the number of the educated unemployed, but what about unemployment of other people. The history of modern education in India would not fail to mention the lead that Bengal gave to the progress of education. It was Raja Ram Mohan Roy who first pointed out the necessity of scientific and English education. It was a happy augury that attempts are being made to impart training in vernacular. But if the medium is to be in vernacular let the matter be through the world of literature. It was Sir Ashutosh who gave Indians a real university in this country. Indians

had every reason to be proud of men like Sir Ashutosh, Sir Jagdish Chandra Bose and Sir B. N. Seal. Scholars like Prof. Meghnad Saha and others were produced because of the opportunities and facilities given by Sir Ashutosh, whom I consider to be one of the greatest nation-builders. So long as the University of Calcutta was merely a degree-giving centre Government liked it very much. But it fell into disfavour as soon as Sir Ashutosh began to introduce reforms and extend its activities. Controversies as to the proposed control of secondary education in Bengal are already having repercussions throughout India. The only justification for the Secondary Education Bill is that it makes education hopelessly secondary to other considerations. Without intellectual leadership, no nationalism can flourish. It is the University alone that can supply the intellectual leadership. To put a stop to university education is committing suicide by the nation.

# THE EXTREME URGENCY OF EDUCATION IN INDIA

BY

SIR NILRATNA SIRCAR, Kt , M A , M D , D C L , LL D  
*(The Inaugural Address of the 13th All India Educational  
Conference delivered at Calcutta, on  
December 27, 1937 )*

As one who has stressed the need of education for the past fifty years of his life, it gladdens my heart to see such a large gathering of distinguished educationists, assembled here to day to discuss the educational needs and problems of our country. As a humble servant of this University, in whose Senate Hall you are meeting today, I feel proud to have the privilege of inviting you to commence your deliberations.

My only regret is that the Vice Chancellor of our University Mr Syamaprasad Mookerji, is unable to welcome you in person, owing to unavoidable absence from Calcutta. He has, however sent the following message to you —

“ I very much regret that I am unavoidably prevented from welcoming you personally on the opening day of your Conference. You will be assembled to discuss some of the vital problems of education which are of special importance during the present stage of our national development. The range of your discussions is very wide and will include educational problems affecting the primary, secondary and university stages. It is of paramount importance for us to emphasise that no nation can ever attain its full height socially, economically, intellectually and politically unless the system of education provides for a full and harmonious development in respect of all stages of education. Further, the task of educational reorganisation affecting the well being

of millions of human beings cannot be achieved without unstinted financial support from the State. I sincerely hope that unity, reason and fearlessness may mark your deliberations and under the guidance of your distinguished President you may be able to formulate your demands consistent with the advancement of the highest interests of our country."

You are holding this session of your Conference at a time when the provincial councils have for the first time been formed entirely of elected members, and have been entrusted with some measure of power to rule. Power has its responsibilities and the future welfare of our country will depend, to some extent at least, on our ability to use our gain to the best interest of our people. The spread of education is one of the most valuable uses to which such power can be put; and it will be your duty to help your Ministers, with your deliberations. For the wise decisions at which a learned gathering like yours, will arrive, and the schemes that you will formulate, cannot but be of great use to the Education Ministers who are trying to solve the same or similar problems. In this connection you will no doubt discuss the scheme of national education which our great countryman Mahatma Gandhi has recently enunciated at Wardha.

I should also in this connection draw your attention to the initiation of the national education movement in Bengal over three decades ago under the leadership and guidance of our late lamented illustrious educationist Sir Gurudas Banerji—a movement which has expression among other ways in the splendid work done under the National Council of Education. Your deliberations on national education will, I am sure, be very helpful to those who are actively interested in this all-important problem.

Your deliberations, I am sure, will lead you to face the problem of communalism in education, which unfortunately threatens to raise its head in some parts, at least, of our country. As one of the leaders of the Moslem community, the late Sir Fazli Hussain, remarked in a speech before the previous session of your Conference, tolerance is the creed as well as the practice of developed forms of society and is essential in a country like ours where races and religions, castes and faiths mingle



# THE FAILURE OF MODERN EDUCATION IN INDIA

BY

SANAT KUMAR ROY CHoudhary, M A , B L ,

*Mayor of Calcutta Corporation*

*(The Reception Address of the 13th All-India Educational Conference delivered at Calcutta on  
December 27, 1937 )*

Assembled as you are for the improvement of Education in India there are very few problems which are more urgent or likely to be of greater service to the country. For upon proper education depends the future of the nation, the solution of its manifold problems, the employment of its teeming millions and the place our Motherland shall take amongst the progressive countries of the world.

We have traditions about real education in this ancient land of ours. The ancients never mistook literacy for education. There have been men and women—outstanding figures in the history of this land from very ancient times who were not literate, but he will be a bold man who says they were not educated. Sister delegates will pardon me if I venture to say that our grandmothers without a smattering of the three R's were more educated and better fitted to take up the duties of life than many of our progressive sisters of to-day.

If the object of education be to equip us for the struggle of life, to enable us to take our place by the side of men who are the masters of the world, to make us self-reliant, active and successful, it has to be admitted that the educational system now in vogue in our country has failed.

Analysing—and the materials at my disposal are the conditions in Bengal—I find that one of the main reasons of the failure is our subjugation. With every conquest there is borne upon the minds of the conquered, consciously or unconsciously, an idea of the superiority of the culture, methods, education and even the religion of the conquerors. The old moorings snap and until they acquire

new anchorages or come back to their old ones, the conquered are reduced to a position of drift. Dazed by the success of ideals and culture not their own, imitation of their rulers is considered by subject races to be progress. They discard everything native to the land, take great pains to acquire the language of their masters and begin to judge the worth of their fellow men by an entirely false standard, *viz.*, "the proficiency in the rulers' language." The inevitable result follows. The progress made by themselves in different arts and sciences is not sustained nor followed up, but an ineffectual and unsuccessful attempt made to begin again in those very subjects according to new methods and new standards handicapped by initial disadvantage of mastering the language, habits, customs and modes of thought of the ruler. It is one thing to retain what is your own and to find out what progress has been made in other countries and adopt or assimilate them; it is quite another to discard what is your own, and try to introduce a foreign system or culture. Like an exotic plant it may live but it will not produce the flowers or fruits it does in its native country. After conquest by Mahommedans, Bengalees began to learn Persian and some of them became so proficient in that foreign tongue that they were considered to be good Persian poets. But they never became experts in the Military Science, or Architecture or garden planning like the Mahommedans, nor did they acquire the perseverance, hardiness and venturesomeness of their conquerors. Similarly with the conquest by the English many of us have learnt the English language well, some of us are in habits and thoughts Englishmen, but have we acquired their grit, their indomitable courage, their methods of scientific research?

No doubt under modern conditions, the world is at your door, and in order to communicate with and receive informations from the outside world, it is necessary to learn a foreign language, but should that be any reason why all students should learn it? It is a matter of great satisfaction that our educationists have come round to the view that education should be imparted in the students' vernacular. One of the problems that has to be considered is whether the new system of education should not be based on the old system indigenous to this country discarding it only when it is unsuited to our present needs. I

shall give one instance—we have written and unwritten rules of personal cleanliness and hygiene, those rules might be taught to our children unless they are proved to be harmful, in preference to rules of Hygiene imported from abroad. Another instance will not be out of place. In Bengal, *Subhankari* (rules for arithmetical and land measure calculation) used to be taught in Pathshalas, in easy verse in Bengali. The result was that boys trained on this system were better equipped in Mathematics than older boys trained on the English system. One would like to see *Subhankari* to come into its own and find a place in the curricula of schools.

To my mind there is another initial defect in the present system of education. It was no doubt planned with great foresight and statesmanship, but unfortunately for us it was not planned to produce men—it was planned to supply the demand then keenly felt of cheap clerical labour and English knowing subordinate judiciary, the high offices in both lines being kept reserved for the rulers. Times gradually changed and other subjects of study have been gradually introduced, the framework having remained unchanged. In Bengal the constructive genius of Sir Ashutosh Mukerjee, the munificent gifts of Sir Tarak Nath Palit and Sir Rashbehari Ghosh and the services of men like Sir P. C. Roy and Sir J. C. Bose in the cause of education although they have furthered the cause of scientific research, have not been able to place education here on right lines so far as the general body of students are concerned. My principal complaint against the present system is that it has not produced men who have added to the wealth of the nation or the country. It has not even helped to conserve the country's wealth. All round me, I see a huge waste of human brains and energy and I ask myself. Can this nation live much longer? Take my own profession, the Law. It is a parasite profession, yet for want of any other opening young men are entering it by hundreds every year. The result is that brilliant intellects which might have shone in the sphere of, say, Banking, Industry, Agriculture or Commerce, rot in the Bar Libraries. I would suggest for the consideration of the President and the members of the Conference whether one of the first duties of persons in charge of education of young men and boys should not be to guide them and induce them to take up lines where they may easily

find profitable employment and whether the Universities should not set their face against increasing the army of the educated unemployed. It has to be admitted with regret that our present educational system makes snobs of our students and they become misfits in the social organism. I have seen with sorrow sons of poor agriculturists and artisans passing the Matriculation Examination and thereafter trying to pursue their studies in Arts and Science which can never fit them to earn their livelihood. They are intelligent and industrious and often depend upon charity or private tuitions for completing their higher studies. They pass their B.A. or even M.A. and then begins the tragedy in their lives. Most of them seek service and cannot get it because in no country can services absorb all the young men that pass out. They have become unfit for the avocation of their fathers, partly because of want of training,—for all professions require a period of apprenticeship,—and partly because after passing through a University course they develop a false idea of dignity. It sometimes happens that after repeated failures to secure service the young graduate makes up his mind to take up his father's profession—too late—for by that time the paternal property or the paternal trade has passed out of the family. I have on different occasions stated my views to the poor students ambitious to have degrees of the University and have been told that I am only trying to lessen competition for myself and my class or when the student is from the backward classes, that I had not desired their uplift. I can only say to my critics that they are wrong, and all that I wish to see is that young men should not waste their energy in passing examinations which to-day are not the passports to well-paid jobs that they once were.

Another important problem before this conference is women's education. I do not doubt the equality or even superiority of women in the educational field. But we have to recognise that women have to be mothers and wives, and the education they receive scarcely fits them for their duties in life. In every society, its stability depends upon the women. They are more religious and moral than the men. I am a Hindu and I can speak of Hindu women, that they are the noblest of God's creatures. It is their character and devotion to their duties and affection for their children that has enabled the Hindus to survive

repeated onslaughts on their religion and culture But I am sorry to say that I am noticing signs and ominous signs which spell the ruin of our homes Our sisters and daughters have begun bobbing their hair, smoking cigarettes, and enjoying themselves in company with their men friends and seem to be averse to undertaking the duties of a home They are trying to lead independent lives, but let me remind them that few as are the openings for service so far as boys are concerned, the openings for girls are fewer I will leave it to you to consider whether in a scheme of education we have not to evolve some system which will train every boy and girl in our country and fit him or her for his or her duties in life

Speaking of Bengal again, I cannot forsake this opportunity of stating some facts about the present system of Education which I have noticed Our young men and even graduates have no general knowledge about their country and other countries of the world They only study those subjects which figure in their curricula, in most cases they do not really study but cram short notes a few months before the examinations which enable them to pass After the examinations no impression is usually left on their minds of the subjects they studied This is a waste The student has wasted his years at the school or college, and the nation has wasted its energies in trying to educate the student This conference will undoubtedly take up the question whether some method cannot be found to make the subject interesting to the student and impress the lesson deeply on his mind so that he will not easily forget, whether Museums Laboratories, workshops, experimental farms and personal manual work will not be very helpful, whether teaching with the help of exhibits and teaching of the elements of science with the help of laboratories should not be made compulsory in the Primary Schools of our country It is agreed on all hands that Primary Education should be made free and compulsory for all boys and girls The conference will have to consider whether the present method should not be changed and the son of the artisan or the agriculturist should not be given lessons both practical and theoretical in those subjects in the Primary School Primers in vernacular with plates and pictures may easily give these students the information about their special subjects It has to be considered whether to mufassil students in Primary Schools along

with hygiene, some books in vernacular on cattle diseases and their treatment should not be taught and to girl students the art of simple painting and drawing designs, sewing, knitting, spinning, cooking should not be taught. Whether girls in Mofussil should not be given lessons in paddy husking, rice frying, weaving nets, rope making etc., and whether to all girls simple remedies for simple ailments—specially, cures for children's diseases, I mean *Mustiyoga* should not be taught.

The human mind in its infancy cannot grasp the abstract, but make the lesson concrete and attractive and it will leave a lasting impression. Our people may have been illiterate but lessons in civilization, morality and piety they always learnt through the medium of *Kathas*, *Paths* and *Jatra* or dramatic performances. With the advent of western ideals these have practically disappeared and he will be a benefactor to our Society who will revive those things in a form suited to modern conditions.

Without discipline and health, education cannot be complete. I hope that one of the results of this conference will be that boys and girls grow up under discipline and are able to enforce discipline. Terrorising is one method of enforcing discipline but it is certainly not the best. Make it apparent to the students that discipline makes for harmony, efficiency and good work, and most of them will accept it. There must be stray cases where this method will not be effective but it is best to eliminate such students, or apply punishment to them only. If we form the boys and the girls into groups, their natural leaders will come up, and training them you will have future leaders of the nation.

One way of making students self-reliant is that all boys and girls should be set tasks without any previous hint as to how they should be performed. This will develop their intelligence and initiative which is sadly wanting even in the best students of our universities. I attach great weight to this aspect of education; it will fit the students more than anything else for their duties in life.

Coming to the question of health, I note with pleasure that authorities are insisting that all schools should have playgrounds. If each school cannot have one, arrangements may be made to share the grounds. Play promotes a spirit of camaraderie and unity amongst the players.

If the players are trained to forget that they are individuals and to consider themselves to be parts of one unit, it will make them feel that their individual interests are of no moment when common or national interests are concerned. It will enable them to overlook or endure the peculiarities of other fellow workers and promote harmony, without which team work is impossible.

I have one more point to mention before I conclude. It is the cost of education. In our boyhood, the Pathshalas teaching up to the Upper Primary Standard cost the boy four annas to eight annas per month, the High Schools, Rs 2 to Rs 3 per month and the private colleges, Rs 4 to Rs 6 per month, the Presidency College, Rs 12 per month. Since then our individual earnings and national wealth have not increased but the cost of education has gone up by 50 to 100 per cent. Some means should be found to bring the cost down to the former level. Public bodies also spend a great deal more per boy than they should in the schools they run. The Corporation of Calcutta spends Rs 11,03,000 on the education of nearly 34,000 children in its own free primary schools—a figure which works out at Rs 30 approximately per head. The teachers have a grade rising up to Rs 100, which, in my opinion, is high for a poor country like ours. But nothing can be done for in a democratic institution, it is difficult to have reforms and retrenchment, specially when there is an organization to counteract your efforts. This Conference composed as it is of educationists from the whole of India should also try and fix standard salaries for different classes of teachers and professors. A specialist in his subject will always command high fees and salaries but in the larger interests of the country he also may be requested to take a moderate honorarium for his services.

The present system of altering the text-books every year adds to the cost and difficulties of poor students, I cannot understand why the same text books if they are well chosen will not do at least for a number of years. One hopes that the school authorities and University will look more to the interest of the students than to that of the authors. In our student life I remember having used the books of my elders. This is impossible now for there is a change every year. I hope one of the questions which this Conference will take up will be whether there is need

for such a frequent and kaleidoscopic change in textbooks.

Speaking of Bengal, there are clouds in the horizon of education which threaten to retard if not destroy the basis of sound education in this province. I mean the introduction of communalism in education and the control of education by non-educationists. So long as their classics, their cultures and religions are safeguarded, I cannot for the life of me understand why it should be necessary for Christians, Jews, Mahomedans and Hindus to have proportionate representation in the Universities and the Senate? Is it suggested that the Hindu examiners and paper-setters show partiality towards Hindus and dishonestly do not allow students of *other nationalities or communities* to pass. If that is the suggestion it should be openly made and the persons denounced. If on the other hand that is not the suggestion, there is no justification for the constitution either of the proposed Board of Education or for the University and the Senate to be constituted on communal lines.

As regards the Board of Control, why should the control be in the hands of others than the University? I could understand if it was proposed that the proposed Board of Control should be a liason body between the students and their prospective employers. Then the said body might have framed the course of studies and the admission to different courses according to the demands of the employers. That would be a distinct improvement upon the present system of aimless education and subsequent unemployment. But that is not to be. As first fruits of the proposed Board we are promised a reduction of the number of the High Schools in this province all of them built up by the generosity of local patrons and the self-sacrifice of a local band of workers. It will be a cruel blow not only at the system of education but at the sources of public charity and generosity which are bound to dry up. I still hope that the authorities will reconsider their decisions and allow the schools to exist.



# THE NEW EDUCATION IDEALS OF SOCIETY

BY

DR RABINDRA NATH TAGORE

*(A Message to the New Education Fellowship  
Session of the 13th All-India Educational Conference, Calcutta)*

Though my frail health deprives me of the privilege of being present in the midst of this distinguished gathering, I have great pleasure in welcoming you all on this occasion, which is distinguished by the presence of our guests from overseas. I am particularly happy to note the international character of this conference, for though each country may have its particular problems claiming particular solutions, true education, like all great arts, must have its basis in principles that condition human development everywhere. It may be my bias as an artist, but education seems to me essentially an art whose problem we solve not by discussing systems but by discovering creative sources of inspiration. When this source is a human one it dwells in a teacher who is ever a student and, therefore, through whom a perennial intellectual eagerness acts as a dynamic force spreading in its surroundings a disinterested impulse for knowledge.

Those, who have garnered for good their stock-in-trade as schoolmasters and shut their minds against the growing harvest of truth, can only reproduce their lessons as gramophone records, repeating with dull accuracy stale passages from second hand stores. They burden the minds but seldom nourish it. Teachers should be ideal comrades of those whom they teach, and through the course of teaching their own minds should be stirred in sympathy with the stirrings of the young minds. The joy of imbibing a lesson oneself ought to find its true expression in infusing it in others. When we see such a living enthusiasm lacking in those who act as guides to their pupils, who are ready to raise to them ruling rods from a distance but not offer them the helping hand by their side,

as too often is the case, they should be reminded that they have chosen a wrong vocation and should, for the sake of humanity, change it without delay for that of a jail warder. A genuine sympathy and respect for the students creates an atmosphere of freedom in the classes which is indispensable to the commerce of culture which is named education.

Another stream of inspiration ever flowing towards us comes from the heart of mother Nature where she is generous in her gift of light and sky, in the colourful pageantry of her seasons. I can never forget the misery which I suffered as a boy when I was daily deprived of human sympathy within the school walls and Nature's ministration of beauty around them. Young minds gradually forget their need of these vitamins of life, and are taught to rely upon some substitute fare of lessons considered to be principal elements in the muscle-building of the intellect. I believe that it is imperatively necessary, that all important educational institutions should be founded in those places where Nature reveals her eternal majesty of beauty and grandeur, according to which our places of pilgrimage have generally been chosen in India. Consecration of our life waits to be received from Nature's own hand and it should accompany our training of heart, mind and imagination, a training which is not only for the production of timber of a high market value, if mind could be compared to a tree, but for exhibiting the wealth of its flowers which contributes to the joy of creation, often without our noticing it.

Another necessary factor of education is the environment of national mind. But unfortunately we have not had the opportunity of cultivating it in India for over a century and such a privation can never be compensated for by the establishment of law and order, which our Government has so often boasted of, and which is merely an imposition from outside, superficial in its genuineness. In the olden days in India, there was a uniformity of culture, having its guardians and centres of distribution, in different places which may be called university towns. Like as in the organ of the heart, the life-blood of the common culture was generated and kept pure in these places, where great scholars gathered and owned their sacred responsibility to the society to offer their learning freely to those who came to claim it.

Today our few universities are like oases in the heart of a vast desert of illiteracy, whose gifts are for a few, producing a language and a mental diet that remain foreign to the multitude. Such a meagre education, product of very narrow reservation plots, often has reactionary symptoms on the nature of those who are classed as the educated, the strong gravitational pull of their surroundings violently dragging them back into the dark cell of mediaeval unreasons. Such an education can never attain its depth of reality and when our foreign critics laugh at some manifestation of our imperfection, very often turning it into a propaganda for humiliating us before the world, they seem to us blissfully ignorant of their own responsibility for such a tragically stupid result.

Nor may we underrate the great influence exercised on the child's mind by the values that prevail in the society in which he is born and brought up. If these values be perverted, no sort or amount of formal education can save the child from their destructive effect. For these values effect the mind as subtly and surely as the physical climate on the body. Good education of children is not possible unless good ideals govern the society. Methods of education may be modern and scientific but they will only chain and debase the mind more effectively if the purposes they serve are ignoble. Educationists, therefore, must remain more or less helpless in an age where collective greed is glorified as patriotism and inhuman butchery is made the measure of heroism.

I have taken the liberty of drawing your attention to the universal principles that must govern the value of education as an art and determine its success for good or ill. As regards the particular problems that relate to this country I leave them for your mature deliberations, which I shall read with great pleasure. My own ideas regarding these problems I have emphasized so often before my countrymen that I am reluctant to reiterate what have come to be regarded as mere platitudes. And platitudes, indeed, all ideas tend to become, unless worked out in some living form. I am, therefore, glad that some of you will be coming after the conference to our Ashrama at Santiniketan, where I may be able to show you how I have struggled for the last thirty years to create for our children an appropriate atmosphere, giving it the

principal place in our programme of teaching. For atmosphere there must be for developing the sensitiveness of soul, for affording mind its true freedom of sympathy.

Now that Mahatma Gandhi has taken up the cause of mass education in earnest, we may be sure of great results in the near future. Already great interest has been roused in the country and controversy provoked over the question whether education can be made self-supporting. Before you too are likewise provoked in violent agreement or disagreement with the proposal, I would remind you that Gandhiji's genius is essentially practical, which means that his practice is immeasurably superior to his theory. As the scheme stands on paper, it seems to assume that material utility, rather than development of personality, is the end of education, that while education in the true sense of the word may be still available for a chosen few who can afford to pay for it, the utmost that the masses can have is to be trained to view the world they live in in the perspective of the particular craft they are to employ for their livelihood. It is true that as things are, even that is much more than what the masses are actually getting, but it is nevertheless unfortunate that, even in our ideal scheme, education should be doled out in insufficient rations to the poor, while the feast remains reserved for the rich. I cannot congratulate a society or a nation that calmly excluded play from the curriculum of the majority of its children's education and gives in its stead a vested interest to the teachers in the market value of the pupils' labour. But these defects seem such only on paper, for no man loves the children of the poor more than the Mahatma and we may be sure that when the scheme is actually worked out by him we shall discover in it only one more testimony to the genius of the practical sage whose deeds surpass his words.

# EDUCATION FOR LIFE AND INDUSTRY

BY

MR. SALTER DAVIES,

*Director of Education, Kent*

*(Extracts from a public lecture at the 18th All India Educational Conference, at Calcutta)*

It is true that our definition of education must depend upon the meaning that we give to the end of life itself, and before we can arrive at a satisfactory definition of education we must make up our minds, however partially, however incompletely, as to the ends for which we have been placed upon this earth.

Briefly put, there are two views about the end and purpose of life. One view is that the end of life is to live for one's selfish purpose. The other view is that the main purpose of life is to serve the common cause. I think these two views are not so far removed as they might at first sight appear to be. It all depends upon the interpretation that one gives to it, because is it not true that we can not serve a community as we ought to serve unless we develop our own individuality, our own personality to the fullest possible extent? And that doctrine might be applied to our national life as well as to our individual life. It is the duty of every nation to develop its own genius, its own particular culture to the fullest extent, but nationalism must not stop there. Every nation has its own contribution to make to the common weal and nationalism may become a curse instead of a blessing, if it is solely concerned with the interests of one particular nation. We are all members of one whole, and each individual and each nation must keep in view the good of the whole.

There is in certain countries a philosophy which has gained great popularity in recent days, the philosophy that the sole duty of the individual is to the State, which implies that one has to obey slavishly the commands of his leader. We have seen the development of that philosophy in some countries of Europe. It is true that this

philosophy has welded these nations together into a unity, which those of us who believe in free democracy never accept, because that unity has been achieved by force, by the concentration camps, gangster clubs and murderer's bullet and by other methods which in free democracy we can never tolerate. Those nations teach us that truth is not truth unless it tends to serve the interests of the State, that beauty is not beauty unless it emanates from the particular race under consideration. It seems to be more important than anything else at this crisis in world affairs, that we make up our minds clearly as to the philosophy underlying that sort of teaching.

The end of life is to learn to distinguish between temporary and eternal values of life, and no education is worth the name unless it teaches our young people to respect these eternal values. The underlying purpose to education, therefore, is to teach our youths the values of life.

There are two extreme views on the matter. The first extreme which was very common in my country some thirty years ago, is that education is for life and not for livelihood, and that embodies a mixture of truth and falsehood. And the other extreme is represented by those people who tell us that the only purpose of education is to train boys and girls for livelihood. I feel that this view is as false as the other and that the truth lies between these two extremes. Education for life and not for livelihood. How absurd! If livelihood is an important and integral part of our life then education must be largely meaningless and futile unless it prepares the young people to earn their livelihood. I think education is something more than education for vocation. It has been one of the greatest tragedies of education in all countries that the educational system which has been evolved in that country has failed to attach importance to the training of the hand to manual work. I think there is nothing which it is necessary to emphasize more than the dignity of work. It does not depend upon the nature of work but upon the spirit that is brought to it.

The quality of our education depends more than anything else upon the personality and quality of our teachers. I do not think that any scheme of education, however admirable in theory it might be, has any chance of success unless it succeeds in attracting to the teaching the best

men of the nation for the greatest work that has to be done by the nation. The selection and the training of teachers is in my opinion the most vital problem that any country has to face.

## THE WORLD'S MOST POPULAR DRINK

It is estimated that approximately 200,000,000,000 cups of tea are drunk every year in all parts of the world excluding China, where the consumption is unknown.

According to official figures, the annual total amount of tea produced outside of China is over 900,000,000 pounds, out of which something like 400,000,000 pounds come from India. At the present moment the annual *per capita* consumption of the country, that produces nearly half the tea which the world drinks, works out to about 4 ozs only as against 10 to 11 lbs per head of the population of Great Britain. All eyes are now, therefore, turned to India with her over 350,000,000 inhabitants, because were every Indian to drink even 1 lb of tea per annum the present difficulties of the tea industry would be at an end.

Efforts are being made to quicken the rate of Indian consumption, and within the last few years there has been an appreciable increase. Not more than 15 years ago the internal consumption amounted to a mere 30,000,000 lbs; to day it is nearly treble that amount. The estimated quantity of tea available for consumption in India and Burma for the year 1936-37 places the figure at 93.6 millions.

Observing the increasing recognition given by the Indian public to the world's most popular beverage, a leading economic journal in this country, the *Indian Economist*, confidently expects that the internal consumption figure would soon reach the 100,000,000 lbs mark. The journal adds "It was demonstrated clearly that tea was no longer a luxury to be avoided by people, and that there was no reason why the lower and lower-middle class should not increasingly take to tea."

—“INDIAN TEA BULLETIN” OCTOBER 1937 ISSUED  
BY INDIAN TEA MARKET EXTENSION BOARD

## MAHATMA GANDHI'S WARDHA SCHEME OF EDUCATION

*(A summary of the discussion held at the 13th All-India Educational Conference, Calcutta, in the general session on December 28, 1937.)*

Initiating the discussion Principal K. G. Saiyidain of Aligarh said that Mahatma Gandhi was the first person who had envisaged the possibility of a continuous seven years' course of compulsory primary education for the masses. 'He has the intuitive vision to link up education with rural life and to realise the social and moral implications of productive work as a means of imparting integral education. He has suggested a way of transforming the existing "book schools" into "work schools" and thereby rescuing children from the intolerable boredom of a purely academic and passive education. He has opened up the possibility of releasing the creative impulses of children through school work. Above all the scheme has profound psychological value inasmuch as it lifts educational problem of the country to an entirely new plane.'

Dealing with the self-supporting aspect of the scheme Mr. Saiyidain replying to the charges levelled against it observed that the charges that the scheme proposed to harness children to an undesirable profit motive was simply untenable. Critics had failed to realise that working for profit—when it was neither for selfish end nor exploitation of others but was in fact an active participation in a national service of the greatest significance—was highly commendable. It should be borne in mind that the idea of self-support had been used in a limited sense. Mahatmaji's stipulation was that children's earnings should in due course, cover the recurring expenditure on the teachers' salaries, all other expenses being of course met by the state. The reason why Gandhiji had insisted on retention of that condition, was that he realised that unless some measure like this was adopted to overcome the handicap of finance, the proposal of establishing a system of free and compulsory



education extending over seven years would continue to reside in the region of pious hopes and remote speculation. If, on the other hand, a considerable part of recurring expenses could be met otherwise the state would be able to inaugurate the scheme forthwith. Mahatmaji did not want merely the introduction of handiwork or practical work as an extra subject, a kind of set-off against the theoretical studies. He desired the crafts were to be taught to the standard of economic productivity so that a student who passed out of the seven years' school should be able to earn at least Rs. 15 per month if he took it up as his regular occupation.

Proceeding the speaker enumerated the difficulties which the advocates of the Wardha Scheme would be called upon to face if it was to be carried into effect. He remarked that it would be idle to deny that there were great difficulties in the way of putting the scheme into operation successfully. 'How are the teachers to be trained who will possess the ideology and the mastery of technique demanded by this new basic education? What shall we do to provide books suitable for the purpose? How shall we raise the standard of teaching so as to provide within seven years the necessary modicum of useful knowledge necessary for intelligent citizenship in a democracy? How will the transition be effected from the present to the proposed system? We must remember that any of these difficulties about better books, better teachers, more active schooling, raising of standards are pressing in any case whether or not we adopt the scheme. The issues involved are so tremendous and so significant that no intellectual or financial effort can be too great for this educational reconstruction and neither inertia nor conservatism, nor mental nor financial timidity, could be allowed to stand in the way.'

Referring to the proposal made in the scheme that *educated men had got to be conscripted to work as teachers* in villages the speaker opined that he found himself entirely unable to share or appreciate the amusement at the idea of educational conscription. He asked how could people without any quickening of indignation or surprise envisage the conscription for destructive purposes but not for education.

Prof. Kuppuswami Aiyangar of Trivandrum thought that the Wardha Scheme deserved neither the encomiums

that had been heaped upon it nor the hysterical denunciation that had been showered upon it. According to Mr. Aiyangar the scheme required elucidation and some alteration. The tragedy of all modern education reforms, he pointed out, was due to the fact that every state, democratic or autocratic, Fascistic or Communistic, wanted to control the education of the young in order to turn them into its own mode of thinking. The result was that they concentrated their attention on the needs of the moment and devised measures to satisfy their purpose, thus making the system lifeless and mechanical and hence unsatisfactory. The Wardha Scheme from that point of view, was no exception. That part of the system that insisted on a profit yielding vocation and rural reconstruction belonged to that category. Any system of education whose basic idea was to train the peoples to a particular vocation, rural or urban, could not form an enduring foundation for future progress. On this point the scheme was not quite clear. Considering the scheme from the educational point of view Mr. Aiyangar enquired 'was this education to be for all, rural and urban? or were they going to have scientific, modern and industrial work for the urban people and handicrafts for the rural people?' If this was what was implied by the scheme, Mr. Aiyangar asked 'was it democratic education? would it not in that case degenerate into a class or caste education?'

Mr. Anathnath Basu of Calcutta drew the attention of the audience to an aspect of the Wardha Scheme which he would call polytechnisation of education, which was very much like the polytechnisation of national education in Russia. But, it must be remembered, that the Wardha Scheme did not want to introduce any vocational bias on the mind of the child. It was something more than that: it was really the centering of education round some form of activity. The people of this country had been too much acquainted with the consequences of an education divorced from activity on the part of the student. Mahatma Gandhi wanted not only to provide some form of activity for every child in school but he also wanted that such activities should be productive. Mr. Basu thought that Gandhiji was prompted by the exigencies of the situation in India. Indians could not afford to pay their teachers as handsomely as the westerners did. It

was deplorable that teachers in this country had to be paid from excise revenue. In these circumstances if the Mahatma wanted the education in this country should be economical and productive, it was in the fitness of things that he did that. Mr Basu believed that that part of the scheme was necessitated by the chronic poverty of the people of this country. Considering India's economic condition that part of the scheme deserved at least an experiment. It was neither very bold nor revolutionary. The speaker believed that the result of the experiment would enable the Indians to solve one of the basic problems of modern education in this land.

Mr P D Gupta of Khurja pointed out that the object of education was not merely to cultivate intellect or train the mind of the child but also to turn him into a useful and productive member of the society to which he belonged. Judged by that standard, Mr Gupta opined that Wardha Scheme was a scheme fit to be tried. He was one of those who believed that a cultured mind in a hungry stomach was a dangerous thing and in this country there was no dearth of hungry stomachs. If the child was given a liberal education in addition to making him a useful and productive member of the society Mr Gupta did not see what objection could there be in carrying the scheme into effect. The speaker did not regard conscription of teachers as an essential part of the scheme as it was a mere by product. But he would like to say that if men could be conscripted for destructive purpose as was being done in the West what harm was there if this country had to resort to conscription for such noble and nation building work.

In the opinion of Prof Diwanchand Sharma of Lahore the adoption of this scheme would mean that schools would be reduced to the level of cottage industries. He could have lent his support to the scheme if it took them back to the 'Ashrama' ideal. But it did not do that. With education there was always attached something that was ennobling. People looked at education from the points of view of Art, of Science and so on. But what was the ideal that inspired the Wardha Scheme? It did not look at education from any of these points of view but it reduced education to a kind of economic proposition. Economic question undoubtedly was vital in the life of a nation. But should not school children be

kept aloof from all these economic questions! If they introduced economic questions into their schools, surely they would be laying the axe at the root of education. He opposed the scheme. Denouncing the proposal of conscripting the teachers as adumbrated in the scheme, the speaker observed that he did not at all like the idea that poor teachers should be made so many unwilling soldiers of this peaceful educational crusade. Mr. Sharma was sure that the Wardha Scheme could not have any ennobling effect on the people of this country, but on the other hand would bring in degeneration amongst them.

Prof. Indra Sen of Delhi stated that in spite of certain flaws and loopholes in it the scheme had possibilities for becoming a means of solving the unemployment problem. It would, however, be a misconception to say that schools started in accordance with the Wardha Scheme would be self-supporting and self-sufficient. Only if the state bought their products they would be partially self-sufficient and thus succeed in solving to a certain extent the problem of unemployment. Hence for the time being, the scheme might be taken up in an experimental form.

Miss Khandwala of Bombay would like to welcome only that part of the scheme where it made provision for a seven-year course of compulsory primary education for the masses. But in other respects, she remarked, it was not going to take them any farther than where they were at present. She did not find any possibility of education being self-supporting. She deprecated the idea, as she understood it, of imposing a vocation upon the child before he was able to select it for himself. She opined that the money that should be obtained from the sale of commodities produced by the children in schools should be paid to parents instead of teachers. She did not think that the schools would be ever self-sufficient and self-supporting. The effect of such a system on the mind of the child would be far from desirable. There was another point to be considered. There remained the possibility of the children being made to work more hours by the teachers so that they might produce more commodities enhancing in this way their income. The people of this country wanted no doubt more and more education but, according to Miss Khandwala, the Wardha Scheme provided no real education for them.

Mr C. V. Chandrasekharan Pro Vice Chancellor of Bangalore University asked the critics to take note of the present economic condition of India which was so frightfully depressing. He would ask them to consider this—whether the accepted theories of western education were at all applicable to the conditions in India to day. With all their defects and shortcomings had not the Nazis the Fascists and the Bolsheviks done a great deal in the matter of re-orientation of education on social and national lines? What did they want?—he asked. Did they not want a rigid uncompromising and an intensely nationalistic outlook? Must they not nationalise their education? The speaker however made it clear to the Conference that he was not a champion of the Wardha Scheme but he would ask the Conference to suspend its decision in the matter until they had got the opportunity to examine all the details of the scheme more closely.

Mr K. D. Ghosh Inspector of Schools Presidency Division remarked that by making teachers dependent on the activities of children as suggested in the scheme they would bring about a permanent enslavement of children. It would be committing the greatest and most stupendous crime if that was done. He said that provision for making the scheme self supporting had been sought to be defended on the ground that the country was poor. Indians were no doubt a poverty stricken people. But at the present moment popular ministries had been formed and the people could force these popular ministers to extend the help of the states to further the cause of education.

## THE GENERAL SESSION ADDRESSES

### 13TH ALL-INDIA EDUCATION CONFERENCE

*(Extracts from the Reports published in Amrit Bazar Patrika and Hindustan Standard.)*

The need for the widespread education was stressed in the course of discussions on the 29th evening at the Senate Hall under the presidency of Mr. P. Seshadri when the All-India Educational Conference combined with a special Women's Education Conference held its session.

A large number of ladies participated. Prominent among those noticed were :—Mrs. H. Murshed, M.L.A., Bengal; Mrs. Rani Ghosh; Mrs. Ashru Bhattacharjee; Miss Kamala Bagchi; Miss Cryon of Delhi; Miss Bijoya Sen; Mrs. Sobha Bose; Madam Bovet; Mrs. S. Chandra; Mrs. A. N. Basu; Miss Saradamma of Travancore; Miss K. Khandwala of Bombay; Miss Manisha Roy; and Mrs. George of Cochin.

Mrs. Murshed in the course of her address said : “ Education to-day stands for certain, unmistakable things. Broadly speaking, it aims at the fullest development of a child's personality under conditions of joy, freedom and clear thinking on the part of the pupils, and smooth understanding and patience on the part of the teachers. It avoids a lop-sided development of child's mere intellectual abilities. Women with very intuitive perception, imagination, sympathy, patience and maternal instincts have a better understanding of children. Then again, in the home, mother plays no less an important part in the education of the child than the mistress in the classroom. The fact that women to-day are not in the vanguard in the educative activities is due, to a great extent, to their having lost sight of the ideals which the Moslem women, for instance, in the past, presented to the world. The history of Islam furnishes us with numerous instances in which women actively participated not only in imparting literary education to the children but also in educating public opinion through their participation in the administration of the affairs of their state and their country.”

Mrs Purnima Basak addressing the gathering said " In the economy of Indian life the women's position is somewhat peculiar Her education should conform to her position in life Its aim should be to produce a better type of mothers, there is nothing to be ashamed of in this Women's special sphere is her unique privilege It is true that for the betterment of the position of our motherland we need women public servants more than we need educated mothers We have to face another difficulty which is not an immaterial one--and that is--that present type of education is already leading to unemployment Education of women should be such as might lead to the making of better types of homes rather than to the taking away of women from their homes As things are proceeding unless we change our whole system, sooner or later we shall be faced with the problem of unemployment of educated women Unemployment among men is bad enough, but unemployment among women will be terrible We shall have a host of educated women, who by virtue of their education will be fitted for anything but a happy home life To face that question we have got to seriously revise the curriculum of studies The same curriculum for both the boys and girls will not do, a special curriculum is needed for our girls Then again education of children up to at least ten should be entrusted into the hands of women "

Mrs Rani Ghosh in the course of her address said " The main principle on which the educational policy was based in ancient India is as dynamic as in the progressive countries of the world The father of such changed order of things and in the direction of reform, specially in the instruction of the infant is Forebel To quote his principle in a nutshell in his words, ' Every object of nature can reveal God ' The object of education is ' the realisation of this destiny, development of this essence into unity with the Absolute ' The unity that be discovered in life in general may be found existing in the wisdom of the Rishis though he gives a practical term to this theory of education One discovers in the classroom and seems to be in the same opinion with Forebel in believing that the children are lovers of knowledge They feel joy in participating in activities such as in drawing, listening to and in narrating stories, in singing, in observing life in general both in the plant and in

the animal kingdoms. Children through these, form a relationship between the outer world and the unfolding of their inner mind."

Miss Chapala Bagchi Mrs. Sobha Bose, Miss Khandwala and Mrs. K. M. George also delivered interesting addresses.

Mr. P. Seshadri, in course of his address, laid stress on the fact that education that should be imparted to the women should be varied. Domestic science should form a part of the curriculum for girls and fullest facilities should be given them for becoming ideal mother. For, the speaker said, that the ideal mother was the only means of building an ideal nation. The future generation depended absolutely upon the teachings of truly cultured mothers.

In his tour to Japan the speaker found to his disappointment absolute dearth of educational institutions for women. Women are given physical training and training in an industrial line, because they found the necessity of women's being a home creature. No better scope was provided for the education of their women on general lines. Moreover their 6,000 symbols of alphabet were very difficult to master in a smooth way. The speaker found only one school in Japan where there was a woman mistress. But now they were going to give sufficient scope to their women to have training in this line and were going to install Roman script in place of theirs.

In course of a paper he read, at the Conference, on "the possibilities of education of children through radio," Prof. S. K. Chatterjee said, that Broadcasting was capable of becoming an invaluable auxiliary instrument in the field of education. Prof. Chatterjee would ask the makers of modern India whether or not they should endeavour to utilise it for reasonable and practical purposes. Tracing the history of education through broadcasting as had been adopted in the advanced countries of the west Prof. Chatterjee opined that radio stimulated children to think, taught them to discriminate between right and wrong, was a source of recreation and entertainment, enriched their knowledge, increased their vocabulary, kept them in touch with current events, instilled an appreciation and knowledge of music, imbued them with a desire to excel in music and artistic endeavours, improved their health and hygienic habits,



and was a good companion in inclement weather and a means of escape from boredom and restlessness

Dealing with the education of the blind, the Principal of the Blind School, at Behala, said, that the attitude of the public and the press towards the blind might be characterised as a combination of pity and wonder based on ignorance, pity which led to impulsive, ill-directed charity and wonder which prepared the ground for the growth of fables and fairy tales concerning the blind. Hundreds of peoples had asked the speaker if the blind could tell colours by the sense of touch. It was amusing to find sensible persons entertaining the idea that it was possible for the blind to tell the colour of a certain thing by means of touch. The public however believed in this sort of wild stories regarding the blind. The overthrow of these fallacies about blindness, the speaker opined, would open the way for a common sense treatment of the blind, a better understanding of their needs in the matter of education and training, and for a better reception of the sightless in the society.

The Thirteenth All-India Educational Conference concluded its four-day session at the Senate House, Calcutta, on 30th noon, Principal P. Seshadri of Ajmer, President, All-India Federation of Educational Associations, taking the chair at the concluding session.

The next session of the Conference will be held at Bombay on December 28, 29, 30 and 31, 1938.

Proceedings of the concluding session of the Conference were rendered lively by animated discussions over a resolution moved by Mr. N. L. Kitroo of the Educational Service in Kashmere State, urging the adoption, as early as possible, of the mother tongue as the medium of instruction at all stages of education.

Moving the resolution Mr. Kitroo said there could not be two opinions about the desirability and also about the undoubted necessity of imparting education in the mother tongue of the child. The claim of the mother tongue as the medium of instruction at the elementary stage of education has never been disputed. In the secondary stage too, recognition has been given by the Universities and District Boards to vernacular as the medium of instruction and examination in certain subjects. The last citadel that they had to take by storm was the University. Here the speaker was conscious of a body of

opinion that held that for practical considerations introduction of mother tongue as the medium of instruction might for the time being be postponed, but an overwhelming body of opinion veered round the view that mother tongue could be the only effective medium for imparting instruction in the University stage too. The speaker would like to make it clear that mother tongue could not be held to be synonymous with vernacular. Referring to the difficulty of too many dialects the speaker pointed out that Russia had solved that problem for them.

Dr. Shahidullah of the Dacca University said that he would like to second the resolution with all the emphasis that he could command. "I feel our national self-respect demands," declared the speaker, "that our education from top to bottom should be in the language of the country. When we are aiming at Swaraj, it is unthinkable that we should still be of opinion that a foreign language should be the vehicle of our university education. That is unthinkable." As regards the objection about paucity of books in the vernacular languages, the speaker would like to point out that when there was no demand, there could be no supply, and when there was the demand, such books would of course be prepared and that was the additional reason why they should have mother tongue for all their courses of education from beginning to end. This would benefit Indian authors and publishers also. The next point that the speaker would like to emphasise was that by having mother tongue as the language for University education, they could cut down at least one year from their college course, and make it five years instead of six, from the Matriculation to the M.A. course without impairing their efficiency whatsoever. So, by gaining one year they would be gaining at least one thousand years for the nation every year, for he calculated that a thousand students came up to the final degree in different Universities of India every year, and this fact could not be ignored when the average longevity in India was only 23 years. Another fact had to be taken into consideration in this connection. If they succeeded in cutting down their University course by one year, they would thereby be able to make a saving of at least Rs. 30 lakhs every year for the whole nation, calculating Rs. 25 per month as expenses for each of the one thousand students that on an average went up for the final degree

in the different Indian Universities "From the economic and the national point of view, therefore," concluded the speaker "we should be united in accepting the resolution"

Professor Nirmal Kumar Sidhanta, Dean of the Faculty of Arts, Lucknow University, moved an amendment suggesting the adoption of the mother tongue as the medium of instruction only in "pre-university" stages of education. In moving the amendment Prof Sidhanta said that he recognised that he stood before them to oppose a resolution which made a call on their national self-respect. If in matters of education they were guided by calls of national self-respect and other sentiments, certainly he was not one of those who was going to be hooted down and he was quite prepared for that. But to avoid such a contingency he would at the outset like to make it clear that he did not oppose the resolution but only wanted to modify it by suggesting that the mother tongue should be adopted as the medium of instruction at 'pre-university' stages. All the arguments that had been put forward both by the mover of the resolution and the gentleman who seconded it, while admirably applied to the secondary stages of education, both lower and higher, would lose force and the practical objections would gain a good deal of impetus and gather force if they tried to apply them to the University stage. The speaker would like to put it to a delegate coming either from Kashmere, Hyderabad, or Bombay if they could tell the Conference as to what they regarded as the mother tongue understood by all in the schools in which they were working. There were practical difficulties. In the U P they had one common language, "Hindustani," and yet a speaker from Benares would not be understood by the people of Lucknow and 'vice-versa'. And it got a very sinister significance in the schools. The speaker would like to tell them for the last ten years, they had been trying in U P to teach in the High Schools of the province largely through "Hindustani," the result of which had been that there had been a gradual segregation of students according to their dialectual differences in language. But the danger had not ended there. There was the danger also to students segregating themselves according to communities. But he admitted that these practical difficulties could be obviated and he was glad that efforts were being made in several provinces to meet them and he wished these efforts

all success in the interest of national well-being. Proceeding the speaker pointed out that the translations could not hope to keep pace with the mass of literature in the different progressive European languages and in view of this they felt that even a knowledge of one language was not sufficient. In the circumstances if they introduced mother tongue as the medium of instruction in the University stage, they would lose touch with the original contributions in the different progressive European languages.

Professor Gadgill seconded the amendment.

Principal K. G. Saiyidain of the Aligarh University opposed the amendment. "I had thought" remarked the speaker "that in the year 1937 it would almost be impossible for a resolution of this kind to be amended in the form that has been suggested for it and I find it very difficult to reconcile this amendment to the liberal views of Prof. Sidhanta." "There is not a single instance in the entire development of the educational history of the world where the culture and the genius of a people has flourished and expressed itself through a foreign medium." Countries like England, Germany and Russia were once under the influence of the French language, but as soon as they realised that that would not develop their national genius to its full stature they adopted their own language as the medium of expression. And would it be said in the Senate Hall of the Calcutta University that the Bengali language through translation would be unable to express all the ideas in different branches of knowledge that would be required for University education? Any attempt to try to postpone a decision on this issue was really, remarked the speaker, following a defeatist policy. All the poverty of the Indian languages had been due to the fact that higher education had been divorced from the vernacular languages, and so long as the educated classes in this country continued to move and have their being in a foreign language, to think in terms of a foreign language, the poverty of the Indian languages would remain. It was a pity that some of the best Indian thinkers and writers were expressing themselves in a foreign language. They had tried this experiment of imparting instruction through the medium of a foreign language for the last 150 years and the result had been for every single person, thousand others had found their genius nipped in the bud.

Mr Hervey of Ludhiana said that it appeared to him that two schools of thought had found expression in course of the discussions. He suggested that there was a third alternative which was to have a common language for India. The speaker said that he was not in favour of continuing English as the medium of instruction at any stage of education in this country, but if they wanted to have the fullest benefit from the introduction of mother tongue as the medium of instruction, they should have one Indian national language.

The amendment was put to vote and rejected by the House, only 52 voting in support of it. The original resolution was then carried *nem con*.

## THE SECTIONAL CONFERENCES 13TH ALL-INDIA EDUCATIONAL CONFERENCE

*(Extracts from Amrit Bazar Patrika, Hindustan  
Standard, and Advance.)*

### I. Childhood and Home Education.

The meeting of the Childhood and Home Education Section of the All-India Educational Conference was called to order by the President of the Section, Miss S. B. Gupta, M.Ed., Inspectress of Schools, Presidency Division, Bengal, on the 28th morning. The proceedings commenced with the presentation of a survey made by the Local Secretary, Dr. Satyananda Roy, Principal of the Teachers' Training College, under the Corporation of Calcutta. The papers and discussions centred round the subject of Infant and Child education along with the problem of parent education.

Mrs. Mrinmoyi Roy, secretary and founder of Jitendra Narayan Nursery School, read her paper in the course of which she described her experiences here and abroad which led her to the opening of a Nursery School in Calcutta. She was followed by Prof. N. S. N. Shastry of the Department of Psychology, Mysore, who spoke on the work that was being done at the Sishu Bihar where they were working with the toddlers and achieving some remarkable results without the aid of any text-books.

Mr. Jogendra Nath Gupta, Editor of 'Sishu Bharati,' was the next speaker on "Child Education in Bengal." He was followed by Prof. Indra Sen, of Hindu College, Delhi, who spoke on "The Significance of Toys in Child Training" and described some of his own experiences in toy factories.

Prof. Parsram of Forman Christian College, Lahore, spoke briefly on the Education of Children of 'Bhadralog' Class. He was followed by Mr. Shrimali who spoke on Home Conditions and Children's Behaviour Problems.

Dr. G. S. Krishnaya's (of Teachers' Training College, Kolhapur) paper on "Some Don't's in Home Discipline" was taken as read.

## II. Secondary Education.

After the usual introduction by the local secretary, Principal S K Roy of Ranchi took the chair in the Secondary Education Section and surveyed the prevailing conditions of Secondary Education in the various provinces in India. He suggested possible lines of solution of current problems and the particular problems under discussion at this year's session of the Conference, viz, Behaviour Problems as they present themselves under class-room conditions.

The President was followed by Prof A V Mathew, the Secretary of the Sectional Conference, who, in his report, gave a brief survey of the prevailing conditions of secondary education with regard to the particular problem which the Conference had chosen to discuss.

After the Secretary's statement the Conference took up the discussion of the problem.

Mr K L Shrimali, Headmaster, Vidya Bhawan and Secretary of the Parents' League, Udaipur, read an interesting paper on "An investigation into the Home Conditions of Problem Children" based on actual experimental study of certain specific cases of maladjustment in about 115 cases that he had come across in the actual work of teaching in the school. The results of this original study were very interesting. In homes where parents are educated and cultured, children get a good background for their future development, which was unfortunately denied to the 115 "problem" cases studied by Mr Shrimali. The homes of these children were very congested and unattractive, and lacked a proper cultural atmosphere so necessary for the balanced development of personality in the growing adolescents. The child who comes from a poor home where he is denied even the bare necessities of life, tends to steal things of companions when placed in a situation where the other children of his own age enjoy the pleasure of life, such as, fine clothes and other luxuries. This study points to the necessity of carrying on further investigation into the problem of maladjustment, because the number of problem children considered in this case was only 115, which is undoubtedly far too small to warrant any scientific conclusion and very reliable co-efficients.

Mr. Shrimali was followed by Mrs. George of Cochin who also read an equally interesting paper on "Behaviour Problems in relation to sense of inadequacy" with reference to secondary school children. Her main contention was that the chief qualification of a teacher was not really the technique of teaching but a proper understanding of human nature. What should be done is to make sure of the nature of the "urge" at the back of an undesirable act and, then, to furnish the child with a more desirable outlet at the same time that the undesirable one is blocked.

Prof. K. D. Ghose, Second Inspector of Schools, Presidency Division, gave an interesting 'extempore' speech on different types of misbehaviour he had come across and suggested simple remedies. Religion, Social Service, Athletics are fine outlets for repressed complexes and unfulfilled desires. All these provide an opportunity for young people to work off some of the surplus physical energy of the maladjusted school child. Most of the conflicts in children arise from ideas related to the moral sphere or to sex, in which cases educators should certainly do well to dispel the child's natural curiosity as it develops.

The next paper was on "National Reconstruction through education" by Dr. K. C. Purani of Ahmedabad. It was a very comprehensive scheme of educational reform put forward by Dr. Purani. As the paper was far too lengthy to be read through in the open Conference, only a summary of the main proposals was read by the Secretary.

At this stage the Conference entered into a discussion of the different specific cases of maladjustment in school children and their possible remedies suggested by the various speakers. In this discussion Mr. Joshi of Bombay, Mr. S. M. Dutta of Calcutta, Dr. Sahidullah of Dacca, Principal Gupta and others took part.

### III. Adult Education.

The proceedings of the Adult Education Section began with Mr. Kalimohan Ghosh of 'Visva-Bharati,' Shantiniketan, in the Chair. The attendance was fairly large consisting of about 60 members, prominent among whom were Mr. Sukumar Chatterjee, Inspector-General of Registration, Bengal; Mr. Buchanan, Director of Physical Education, Bengal; Miss A. Cryan of the Indian



Adult Education Association, Delhi, Principal P Seshadri, President of the All-India Federation of Educational Associations and others

The Chairman first read his address, and after this the Secretary read his report of the work done by the different Adult Education Societies and Associations in India during the previous year. Some very interesting and original papers were read. Mr S K Chatterji read a paper on Adult Education in India. Among others who spoke and read papers were Miss A Cryan, Mr Sangam Lal Agarwalla of Allahabad and Mr B C Roy. The other papers were from Messrs K C Purani, T V. Appasundaram, S K Roy and P C Ganguli, whose summaries were read out by Mr Kamalakanta Mookerji, the Local Secretary of the Section.

#### IV. University Education.

The Sectional Conference on "University Education" was held on 28th morning at Vidyasagar College under the Presidency of Prof N K Siddhanta.

In his presidential address, he mainly dealt with two points, viz, how the different stages of education should be co-ordinated to one another and how at the University stage, more attention should be paid to specialisation which was lacking very much now.

Prof Devaprnsad Ghosh read an interesting paper on "Higher Education—an asset or liability." He regretted that diverse discussions were going on about mere educational machinery, and seldom they touched the kernel of the problem. He opined that mere literacy was not education, nor was education coterminous and synonymous with literacy. Much instruction can be conveyed and has been conveyed through the ages without the medium of books. Education should be broad-based on the bedrock of realities in tune with the requirements of the individual and the community.

Dr S N Roy then read a paper on "Some Conventional Lies of our University" in which he advocated a thorough overhaul of the under-graduate curriculum of the Calcutta University. He suggested a syllabus in which, 'inter alia,' study of Logic and the Bible for Intermediate students should be discontinued and pleaded for the inclusion of Modern History instead of the Histories of Greece and Rome.

Principal Harvey next gave an interesting discourse as to what he was doing in his College at Ludhiana. He has introduced many arts and crafts for the students and explained how they were interesting themselves in gardening, music and sports and many other hobbies.

## V. Internationalism and Peace.

“ There has not been greater need in recent years than at the present time for preaching the gospel of International brotherhood and the avoidance of the horrors of war,” said Principal P. Seshadri of the Government College, Ajmere, in the course of his presidential address at the meeting of the Internationalism and Peace Section of the All-India Educational Conference held at Calcutta on 28th December before a large and distinguished gathering.

He deplored the condition in Spain and the unprovoked Japanese aggression in China. He urged that the members of the teaching profession should advocate the right ideals of conduct to the younger generation so as to ensure the world peace by gradual elimination of mischiefs on the part of humanity. Principal Seshadri was of opinion that “ This section of the annual All-India Educational Conference will have done enough, if it can ensure the effective teaching of this subject in schools and colleges.” In this connection, he referred to the work of the Committee of Educational Experts of the League of Nations. He emphasised the need of teaching Geography in its humanistic aspects and made it clear that history should be revised so as to make it free from racial bitterness and referred to the recommendations that have already been put forward by the Educational Experts Committee of the League of Nations.

Principal Seshadri's speech was followed by a survey of the prevailing conditions in India with regard to the question of teaching of Internationalism and Peace given by the Local Secretary of the Section, Mr. S. C. Basu, Calcutta Correspondent of the League of Nations.

Prof. B. C. Guha in his paper “ Education in the Social Mirror ” said, “ The *raison d'être* of education must in the last resort lie in what it achieves in regard to human freedom and happiness.”

Prof. N. C. Roy, in his paper “ International Culture and Friendship ” stressed the conditions for proper educa-

tion of the younger generations and writing of history with direct object in view. He suggested that in the course of teaching, undue emphasis should not be placed upon the superiority of the culture and civilization of their own country, and in writing history appeal should not be made to the false patriotic instinct by which the young boys and girls are often taught to extol the exploits of local heroes by decrying the deeds of the heroes of other countries.

Prof. Bhattacharyya in his paper on "Authoritarian Education and International Peace" dwelt at length on the evils of such a system of education as is being imparted to day in many countries in Europe and in Japan. "This kind of education," he said, "produces extreme subservience to leaders and a permanent inferiority complex accompanied by compensatory brutality and cruelty." He added, "As an antidote to these evils reliance has to be placed on education based on freedom."

Among those who were present at the meeting were — Prof. P. Bovet (University of Geneva), Mr. H. Boyd (Doon School), Mr. D. C. Sharma (D. A. V. College, Lahore), Mr. G. S. Dutt, I. C. S., Mr. E. Franklin (Spence Training College, Jubhulpore), and Dr. Anna Sjogren of Sweden.

## VI. Examinations

Prof. Amaranatha Jha of Allahabad University presided over the Examination Section of the All-India Educational Conference. He urged the need of a balanced view on the subject. He emphasised that non-academic factors, as for example, character, physical fitness, should be taken into consideration along with purely academic results for the issue of testimonials from the educational institutions. He dealt with the history of the examination system and showed that the extreme academic bias of the present system arises out of historical reasons. He concluded by pleading for the necessity of introducing human element into the machinery of the examination. "Examination is a means and not the end of education."

Papers were read on "Examination: Their Influence on Education" by Prof. Romesh Chandra Banerji of Victoria College, Jessore, on "Examination motivated learning" by Prof. Indra Sen of Delhi, and on

“Reliability of Examination” by Prof. N. R. Paranjpe of Poona (taken as read).

Mr. Kuppaswami Aiyanger of Trivandrum spoke on the “Reform of Examinations.” He said examinations were not necessarily bad. The examination system as obtained at present rested on teachers as judges of their own work. That was why there was the cry for outside examiners.

Mr. K. D. Ghosh of Calcutta spoke on ‘Admission Tests.’ He said that the selection of candidates on the result of combined tests of intelligence and of achievement would be much more satisfactory than selection on either criterion.

Prof. Diwan Chand Sharma of Lahore pointed out that the selective value of our examination is appreciated by employers of educational products and that the extreme criticism of examination is groundless.

Dr. Zilliacus compared the examination system to a yard stick with which one was given to measure the growth of a child correct to a fraction of an inch. He said that scientific studies had definitely established that this system was greatly unreliable. Belgium, Australia and large parts of U.S.A. tried to replace external examinations. He believed that external examinations would be replaced in course of time by cumulative many-sided school record. Record gives more useful information of prospective employees than external examinations. Teachers should concentrate on this work. New Type Tests had an important though a limited place. Finally he pleaded for more trust on teachers themselves to carry out the function of evaluating their work. Neither teachers’ estimate is lower grades nor extreme admission examinations had high prognostic value. Co-operation estimate involving teachers’ judgment and guidance of intelligent but sympathetic inspecting staff had been found to yield more satisfactory results.

Principal K. S. Vakil of Kolhapur and Principal P. D. Gupta of Khurja also spoke.

## VII. Moral and Religious Education.

The Moral and Religious Education Section of the All-India Educational Conference held its sitting at 12 noon on the 28th instant under the presidentship of

Prof J R Banerjee, M A , B L There were four papers in all, one of which was taken as read on account of the absence of the writer, Mr Sudhir Chandra Banerji, M A , B L , Founder Secretary, the Association of Indian Culture The paper of Miss A M Barr, M A (Cantab ), gave an account of the experiment that is being conducted at the Gokhale Memorial Girls' School, Calcutta There the children of all faiths are introduced from the very beginning to the good points of all religions, so that no bias may be formed in any mind for or against any particular religion, or rather the child mind may grow in reverence for all religions She stressed upon the need of differentiating between religion and theology, and explained the former as what is exemplified in the lives and experiences of the great saints of every age and every race,—as what contributes to universal brotherhood

The paper of Mr C Chopra, M A , B L , of the Jaina Svetambar Terapantha Sabha, gave a brief account of the thirteen cardinal tenets of Jainism, and explained how they may form the basis of introduction of moral and religious instruction in our educational institutions The paper of Principal M M Zuhuruddin Ahmed of Junagadh on "The Necessity of Moral Teaching in Primary Schools" deals with the causes that are responsible for the neglect of the principles of ethics in schools It indicates a close relation between the aims of education and the theory of good and evil and points out that the only way of remedying a number of defects found in the character of educated people is to introduce the teaching of ethics at the primary stage of education

A general discussion followed in which Mr J C Bhattacharyya and Mr S P Saikar of Bengal, and Mr V K Joshi of Bombay, participated The President wound up with an extempore speech, stressing upon the need of moral and religious teaching in all educational institutions Education is the fullest development of all the faculties of man, and he could not conceive how any education can be called complete that does not help the development of the moral and religious element in man In his view there can be no morality without religion, and religion, according to him, is the realisation of the will of God in every sphere and every plane

### VIII. Health and Physical Education.

The proceedings began with a brief speech of the President, Pandit Ram Narayan Misra, B.A., in which he emphasised the necessity of Physical Training. The following papers were read and gave rise to an interesting and lively discussion in which Mr. G. F. Andrews, Asst. Physical Director, Madras, Mr. J. Buchanan, Physical Director, Bengal, Mr. Phadke of Cawnpore, Mr. Kulkarni of Oudh, Dr. Davies of the New Education Fellowship delegation and Prof. Naidu took part.

1. On Drills by Prof. P. C. Gupta.
2. On "The Indian Approach to Sex-hygiene" by Mr. K. L. Shrimali.
3. On "Unemployment and Health" by Mr. K. N. Roy.
4. On "Health of School Children" by Dr. J. N. De.

Prof. Naidu then gave a very interesting lecture demonstration on his special system of Psycho-physical analysis. An instructive lecture was delivered by Rai Bahadur Dr. L. N. Chowdhury, I.M.S. (Retd.), of Jubbulpore on "Health and Diet."

### IX. Vocational Education.

Dr. H. L. Roy, A.B. (Harvard), Dr. Ing. (Berlin), M. I. Chem. E., was elected President. He delivered the presidential address. The Local Secretary, Mr. L. Bhattacharjee, read out a paper giving a brief survey of the position of Vocational Education in India at present.

A paper on Agricultural Education was read out by Mr. S. Sinha of Berhampore, Bengal.

Mr. Lakshmiswar Sinha, Viswa Bharati, being absent, a summary of his paper on Mass Education and Vocational Training, prepared by the Local Secretary was read out.

Portions from a note on the Report on Vocational Education in India by Messrs Abbott and Wood by Mr. A. N. Sen, Inspector of Technical and Industrial Schools, Bengal, were read out in his absence by the Local Secretary.

A paper on Vocational Education by Mr. G. C. Das of Gopaldighi, Mymensingh, was taken as read.

In the course of the discussion on the papers, that followed the President observed that the spirit of seeking service was nothing peculiar to the Indians. It was the case more or less in every country even graduates of Engineering and other higher technical subjects being no exception. As large scale industries grew, there would be fewer and fewer independent industrialists in future. All schemes of expansion and remodelling by Government should start with a survey of the existing private and public institutions for Vocational Education. For making a start the existing institutions might be utilised as a nucleus.

### X Teachers Training

The section on Training of Teachers Research and Educational Experiments of All India Educational Conference was presided over by Principal H V Hampton of Secondary Training College Bombay, on 29th. In his address Mr Hampton emphasised the importance of effective training courses and the need for research in educational matters.

The Secretary Dr G S Krishnaya Teachers College Kolhapur described the present condition with regard to Research in India which had resulted in waste ful duplication and unnecessary ignorance and pleaded for the establishment of Bureaus of Educational Research by State and Provincial Governments and the introduction of Post Graduate Departments in Universities for fostering Educational Research.

The Local Secretary Dr S P Chatterjee Calcutta University threw valuable light on the research work being done in Britain France Germany and other European countries and urged the need for similar efforts in India. Dr Chatterjee pointed out that many educational problems were common to several countries, hence the research workers in India should be thoroughly familiar with the work on such problems by foreign research workers.

He was followed by Prof Parsram Lahore who surveyed the trends of educational research in India and suggested that voluntary committees interested in this type of work should be set up in the first instance.

Mr K K Mukherji Calcutta University dealt with the experiments in the use of educational films.

Prof. H. P. Maiti, Calcutta University, drew attention to the indispensable character of voluntary effort along this line.

Professors Indra Sen of Delhi, Krishna Kumar of Cawnpore, Krishnaswami Rao of Mysore spoke on the subject emphasizing various aspects.

In his concluding remarks, Principal Hampton pointed out that Educational Research embraced various aspects and could be best carried on with the combined efforts of voluntary and official bodies.

## XI. Primary and Rural Education.

The Primary and Rural Education Section held its Session on 29th morning under the Presidentship of Khan Bahadur T. Ahmed, Special Officer for Primary Education, Bengal.

The Secretary Sardar A. T. Mukerji and the Local Secretary Mr. H. K. Mandal were both present on the occasion. Over 100 delegates participated in the deliberations.

In the course of his report the Secretary spoke about Mahatma Gandhi's 7 years' scheme of Basic Education and the 'Vidyamandir' scheme of Pt. R. S. Shukla of C. P. He then gave an account of the condition of Primary Education prevailing in different parts of British India as also in some of the advanced Indian States. The president next gave a critical survey of the problems and difficulties facing primary education and suggested their possible solutions.

Opening the discussion Prof. M. S. Sabhesan of Madras said that the money spent on Primary Education was a sheer waste at present as there was no material advance during the period 1905 to 1935. The diagnosis, he said, was perfect but they had practically done nothing to remedy the evils.

Prof. A. V. Mathew of Kolhapur suggested compulsion in selected areas as an experimental measure.

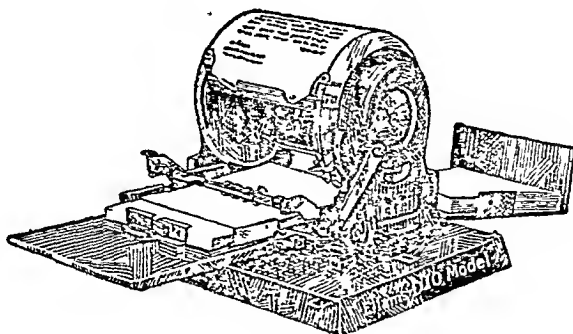
Mr. K. D. Ghosh, Second Inspector of Schools, Presidency Division, suggested that there should be honorary Inspectors to facilitate the work of supervision and recommended the appointment of women teachers in primary schools.

Miss Gangabai Barpute of Gorakhpore speaking about the Wardha Scheme said that education must be



self-supporting and no money from excise revenue was to be expected

Babu Sangam Lal Agarwala of U. P. presented a scheme of adult literacy that he had prepared for Allahabad Municipality



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Conference was held in France in 1921. At this Conference at which some 90 people were present the Fellowship was formally organised. This was the first time after the war when Germans and French met together on French soil and apprehension was felt as regards this meeting but the fear proved to be groundless.

Summing up Dr. Zilliagus said that the New Education Fellowship aimed to further educational improvement and reforms throughout the world so that every individual whatever his nationality, race, status or religion should be educated under conditions which allowed of the full and harmonious development of his whole personality and led to his realising and fulfilling his responsibilities to the community.

Mr. E. Salter Davies said that it would be presumptuous on the part of visitors to dictate to Indian educationists the course which their educational reforms should follow. The utmost they could do was to discuss the general principles of education and to tell them the course which educational reforms had followed in their own countries, so as to enable them to draw some useful lessons. It was true that the East was east and the West was west but there was great danger in exaggerating the differences. It was quite true that there were conditions in India which were not to be found in the west, but at the same time it was true there was essential similarity between the educational problems of India and western countries. The great principles of education were identical although the application might differ.

Mr. Salter Davies said that it had always appeared somewhat pathetic to him that the conference of the kind they were holding devoted so much time and discussion to methods and details which were perhaps unimportant and so little time to the most important question of all, namely the selection and training of teachers. Mr. Davies described in detail the qualities which a man must possess in order to be a competent teacher and added that in England every care was taken to admit only such men and women to the teaching profession as possessed the essential qualities of personality and character.

Mr. Justice Biswas said the aims and ideals of the New Education Fellowship are perhaps not yet as widely known in India as they ought to be. It was only two years ago that an All India Section was established in this

country and under its auspices the Bengal Section was inaugurated a little later. Founded in the year 1915 by Mrs. Beatrice Ensor the New Education Fellowship was from the first an international movement intended to unite those who believed that the problems threatening our civilisation were fundamental problems of human relationship, which demanded a new type of education more responsive to the requirements of a changing world. Since then it has spread throughout the world and is now the one existing permanent educational organisation of world-wide scope. It is a movement, wholly non-political and non-sectarian in character, is not confined to the narrow interests of the teacher, but rather taking the child at its centre, it concerns itself with all the influences that bear upon him. It co-operates, therefore, not only with parents and teachers, but with social workers and internationally minded people in many different fields and in all countries.

‘Education to-day fails to develop the whole man. It trims the wick of the intellect, but does not kindle the lamp of the soul. It inhibits the growth of creative personality. The result is a woeful mal-adjustment to the growing complexities of modern life. All this is what the New Education is out to correct and reform, viewing education as a process of development not confined to the school alone but the result of diverse influences outside and beyond. International in its outlook and character as it is, it does not seek to efface national characteristics, but while helping us to appreciate our own national heritage it welcomes the unique contribution that every other national group can make to the culture of the world.

‘The New Education has not come into existence a day too soon. The world is falling to pieces before our eyes, but there is no need to despair. The instruments for man’s liberation lie in the depths of his own being. What is needed to-day more than anything else is a deeper understanding of the growth of the human mind, and a deeper realisation of the essential unity of human life. Therein lies alike the hope and the assurance of that future which alone is worth living; for a future which securing the freedom of each, will secure the freedom of all. Is it necessary for me, my friends, to emphasise the special appeal which this new gospel of education should make to us in India, and particularly in Bengal?’

## THE CONFERENCE DIARY

### THIRTEENTH ALL INDIA EDUCATIONAL CONFERENCE CALCUTTA

December 26—31, 1937

(*Note*—The time given in the Diary is Calcutta Time which is to be calculated by adding 24 minutes to the Standard Time)

*Sunday, the 26th December, 1937*

3 P M Opening of the All India Educational Exhibition by the Premier of Bengal

*Monday, the 27th December, 1937*

9 A M Annual Meeting of the Council of All India Federation of Educational Associations for 1938 (Open to the members of the Council only The Council works also as the Subjects Committee of the Conference) (1st Session)

3 P M Opening Session of the Conference Inaugural Address by Sir Nilratna Sircar, Election of the President, Welcome and Presidential Addresses, Messages and Announcements

7 P M Public Lectures

8 P M Musical Soiree

*Tuesday, the 28th December, 1937*

8 A M to 10 A M *Sectional Conference (First Shift) (Vidya Sagar College)*

- 1 University Education Section
- 2 Secondary Education Section
- 3 Childhood and Home Education Section
- 4 Adult Education Section

12 Noon to 2 P M *Sectional Conferences (2nd Shift) (Vidyasagar College)*

- 5 Examination Section
- 6 Health and Physical Education Section

7. Vocational Education Section.

8. Moral and Religious Education Section.

3 P.M. to

5-30 P.M.

General Session of the Conference:—Reports of Sections.  
Papers and Discussions.

6 P.M. Public Lectures.

8 P.M. Dramatic Entertainments.

*Wednesday, the 29th December, 1937*

8 A.M. to 10 A.M. *Sectional Conference. (Vidyasagar College).*

1. Training of Teachers, Educational Research and  
Experiment Section.

2. Internationalism and Peace Section.

3. Primary and Rural Education Section.

12 Noon to 2 P.M. New Education Fellowship. (Public Session)  
(Senate House).

3 P.M. to 5-30 P.M. General Session combined with a special session  
on Women's Education. Reports of Sections, Papers  
and Discussion.

7 P.M. Mayor's Party.

*Thursday, the 30th December, 1937*

8 A.M. to

9-30 A.M.

Second Session of the Council Meeting. (Senate House).

9-30 A.M.

to 12 Noon

Closing Session of the Conference. Papers and Discussions.  
Prize-giving of the Tennis Tournament. Resolutions.  
(Senate House).

2-30 P.M. New Education Fellowship. (Business Meeting).

4 P.M. Bratachari Display.

*Friday, the 31st December, 1937*

Excursions to places of general interest.

## EDITORIAL NOTES

### The 13th All-India Educational Conference.

We offer no apology to our readers for devoting the first issue of the year to the 13th All India Educational Conference held at Calcutta on December 27—30, 1937. It was presided over by Mr C R Reddy, the Vice Chancellor of Andhra University. Mr Reddy's presidential address was a masterpiece of eloquence delivered extempore and full of cogent reasoning. His scathing analysis of the criticism of the critics of Indian education was a literary treat and went home. The Reception Address of the Mayor of Calcutta pointed out the lines on which the present system of education could be improved, while the Inaugural Address of Sir Nilratan Sircar pleaded passionately for the expansion of education and the removal of illiteracy. The general session addresses and public lectures were marked by sanity, but nevertheless freshness, of outlook and were exceedingly well attended. The last two sessions were presided over by Mr P Seshadri, the president-founder of the All-India Federation of Educational Associations, whose services in the cause of Indian education are too numerous to mention. The Sectional Conferences were presided over by distinguished workers in the field of education and provided excellent intellectual fare to the delegates. The presidential addresses of the various sections, the papers read therein and the discussions held, were of a high order and added considerably to the educational literature of the country. The All-India Educational Exhibition, the musical and the dramatic entertainments, the Mayor's Party and the excursions were planned thoughtfully and were brought to a successful conclusion. The New Education Fellowship Session added a lustre to the proceedings, while the visit of the overseas delegates was much appreciated. An agreeable surprise awaited the Conference in the shape of a visit to the inaugural session of Sir Srinivasa Sastri, the doyen of Indian liberal politicians and the hero of the Indian schoolmasters, who could with great difficulty be persuaded to give up his seat among the rank and file of the delegates in order to sit on

the dias. The Conference has left happy memories in the minds of the delegates, and Prof. K. P. Chattopadhyaya and his band of assistants are to be congratulated on the success they achieved in arranging such a distinguished gathering of educationists of the country.

### **Appreciation of the Conference.**

Almost all the important dailies of Calcutta gave prominence to the proceedings of the Conference, notably the *Anrita Bazar Patrika* and the *Hindustan Standard*. The *Patrika* wrote "The assemblage, large and distinguished, was worthy of the momentous occasion. Savants and educationists gathered from all parts of India and from beyond the seas to participate in the weighty deliberations that are expected to give a new orientation to India's present system of education." By far the most gratifying of these impressions is the interview granted to the *Patrika* representative by Dr. Laurin Zilliacus, President of the New Education Fellowship, who stated his views about the Conference in the following words:

"The All-India Educational Conference has given me a great deal. It has given me the pleasure of meeting again friends made in other parts of India. It has allowed me to live for a few days at the high intellectual temperature that always is engendered, where a large number of fellow workers come together to discuss common problems, in a spirit of mutual sympathy. And it has shown me, or rather emphasised for me what I already knew, that education in India not only consists of things borrowed, as some of its despondent critics would have it but is also like a growing plant with roots in the soil of its own heritage, bathing in the light of reason and common sense and warmed by the spirit of human affection.

"I am grateful for the instructive and the stimulating discussions I have attended; the same adjectives apply to the Educational Exhibition that I have been privileged to see. And as a representative of the New Education Fellowship I have been happy to see much that I recognise as the expression of the New Education Fellowship.

"I wish to offer the organisers and participators in the All-India Educational Conference the heartiest congratulations and thanks of my colleagues and myself."



### The Indian Science Congress Jubilee Session.

The Silver Jubilee Session of the Indian Science Congress Association combined jointly with the British Association for the Advancement of Science was inaugurated at Calcutta on January 3, 1938, and lasted for about a week. Mr. Syama Prasad Mookerji delivered the Reception Address. His Excellency, the Viceroy, inaugurated the meeting while Sir James Jeans presided over it. This meeting made history and has become a landmark in the domain of scientific progress of the country. In one of our future issues we propose to give extracts from the important addresses of the inaugural session.

### The All-India Oriental Conference.

The 9th session of this Conference was opened at Irivandrum on the 21st December 1937 and was noted for its brilliance and enthusiasm. His Highness the Maharaja of Travancore inaugurated the Conference and Dr. F. W. Thomas, Boden Professor of Sanskrit, Oxford University, delivered the Presidential Address. The vast complexity of Indian culture was brought into relief by the presidential and other addresses and steps were planned for a more intensive study of Oriental literature. The proceedings of the Conference pointed out the way to build up India's future with a proper understanding of its past.

### The All-India Library Conference.

The third session of the All India Library Conference was held at Delhi with Dr. Wali Mohammad as its president. Sir G. S. Bajpai, the Secretary of the Education Department of Government of India, while opening the Conference stated that the power of the appeal of the printed word was coming to be recognised even in countries where literacy was backward. The presidential address emphasised the opening of a Central Institution for the whole of India, the improvement of the training courses for librarians and the holding of library exhibitions and book fairs. The Conference has passed valuable resolutions.

### Bombay Physical Education Committee Report.

The Government of Bombay are to be congratulated on having appointed a Committee to suggest measures for

the improvement and development of physical education in the presidency. The Committee *inter alia* recommends :

(1) Physical education should be looked upon as an integral part of the general education.

(2) The Government should undertake the responsibility of paying full share of the grant-in-aid due on all expenditure on physical education incurred by a school or a local body irrespective of the Governments' ability to pay the ordinary grant-in-aid on total expenditure of that school or local body.

(3) Physical education should be considered as a compulsory subject in school courses of studies and it should have the same status as a major subject such as mother tongue, history or mathematics. The minimum period of tuition should be laid down as five hours instead of four daily, out of which 45 minutes at least should be given to physical activities.

(4) Majority of teachers should be physical instructors.

(5) The Government should start a training institute for physical education in June 1938, admission being open to graduates. The total number of admissions should not exceed 100, half of which should be open to women and no fee should be charged for tuition.

(6) The Government should also investigate possibilities of establishing at an early date a college of physical education on par with the college of engineering with three years' course after the intermediate examination in science.

(7) The institute should be located in Poona.

(8) In Syllabi preference should be given to Indian games.

One may not agree with all the recommendations of the committee but there can be no two opinions about the soundness of the principles on which its recommendations are based. The physique of the Indian children and youth is steadily deteriorating and no sacrifice is too much to improve it. Unless generous and liberal measures are adopted to push on physical education in the country we shall remain a C3 in nation. How we wish that other provinces also moved in the matter!

### Pictures as Aids to Education.

The Government of the Central Provinces have done pioneer work in appointing a committee to investigate into and explore the possibilities of using motion pictures and other pictorial methods for the purpose of child and adult education and physical culture. The Committee is expected to prepare a comprehensive scheme and suggest ways and means of accomplishing the above object. Unfortunately the aid of motion pictures is not widely sought by educational institutions and the fallacious policy of retrenchment in educational expenditure followed by most of our governments is responsible for the relinquishment of all the reforms suggested in educational spheres. A reduction in educational expenditure cannot be reconciled with a policy of educational expansion and development.

### The Aim of Secondary Education

The following extracts from The Scottish Educational Journal will be found to be of interest in India —

“ Lord Eustace Percy, former President of the Board of Education, had some practical comments to make on the aim of secondary education when he spoke at Alnwick last week. There used to be an idea, he said, that secondary education was a big social institution, which entitled those receiving it to go into jobs rather better and to get on a social level rather higher than those who did not receive a secondary education. That kind of superstition was to be found in places like Egypt and India, where the whole education seemed to consist of manufacturing clerks for black coated jobs. We had not been wholly free from it in this country. We wanted the secondary school to raise the educational level, and to raise the tone of all professions and occupations, so that there shall be no walk in life in this country in which the influence of the secondary school was not felt through its old students. That was a far higher aim than the training of pupils for a certain number of professions only.

“ What was true of the secondary school should, in a measure be true of the University. Universities, in the past, had been far too much confined to preparing pupils for certain professions. In the Middle Ages they were almost exclusively confined to the manufacture of clerics and lawyers. In these days the cleric and the lawyer were

often the same person. Since then the University had tended, too much perhaps, to training for certain professions only."

### The World Education Conference.

The Seventh Biennial World Education Conference was held in Tokyo, Japan, between 2nd and 7th of August 1937, in the Imperial University grounds under the presidentship of Paul Munroe of Teachers College, Columbia University. Nearly 2,000 Japanese and 1,000 foreign delegates participated in the Conference, the largest contingent from the U.S.A.

The entire proceedings were divided into 18 Sections, *viz.*, Secondary Education, Broadcasting, Herman Jordan etc. Each section had its own chairman and secretary and papers were read by speakers from various countries and in some sections discussion was also allowed thereon. Most of the sections, however, were monopolised by the Japanese speakers. The standard of the papers read cannot be considered extraordinary, and very few sections had any interesting or lively discussions. A few resolutions were passed on to the General Body. It was quite apparent that the proceedings were more or less controlled and that every one appeared to fall in line with the plan.

There were four General Sessions to welcome the guests, to discuss international peace, to elect office-bearers and directors and to thank the Japanese hosts.

Plenty of fun and play was provided by the Japanese Committee in the shape of excursions round the city and entertainments like concerts, Japanese classical dancing and drama, garden parties, Japanese Tea and Flower ceremony etc.

Batches of students who could speak foreign languages were prepared to help the visitors to go round and to understand things better. We found the people extremely polite and willing to help. Buses were provided to take delegates from place to place. They also made arrangements with hotels and organisations like the Y.W.C.A. and Y.M.C.A. to give facilities to guest at reduced rates.

A mention also must be made of the Educational Exhibition and Art Gallery. The exhibition was very interesting and instructive.

The proceedings were made dull by allowing so many papers to be read in every sections. Japanese propaganda

for everything Japanese was writ largely everywhere. People seemed to be afraid to say what they felt. Every Japanese official—and the Conference was full of them—talked of Peace and International goodwill and co-operation but each one of them in turn justified the aggressive war against North China carried on by its Government. It was a great tragedy that the whole Conference was overshadowed by war atmosphere.

A discordant note was the official and individual boycott of the Conference by China. She was conspicuous and more eloquent by her absence. Chinese educationists sent a letter of protest to the president, Mr Munroe, which could not be placed before the Conference.

### Indian Delegation

There were over 60 delegates from various provinces of India. She was the 3rd or 4th on the list as far as the No. of delegates was concerned. Prin P Seshadri was elected the leader of the Indian Delegation and Miss Khandvala its secretary. A small committee of members from different parts of the country was also formed to help in the Conference work. The following persons read papers —

Principal P Seshadri,	Rural Education in India. Spoke in the General Session on International Peace and Co-operation
Mr Inamdar of Idar,	Adult Education in India
Mr Harbhai Trivedi of Bhavnagar,	Women's Education and Four Fundamentals of New Education
Miss Khandvala	Women's and Girls' Education in the Bombay Presidency

Many other delegates took part in discussions.

Principal P Seshadri gave a tea party to the Indian Delegation at the Imperial Hotel, and the Indian Students' Association and Friends of India Society gave a dinner in honour of the Indian delegates.

(We are able to publish the above two notes by the courtesy of Miss K. Khandvala, the Secretary of Indian Delegation)

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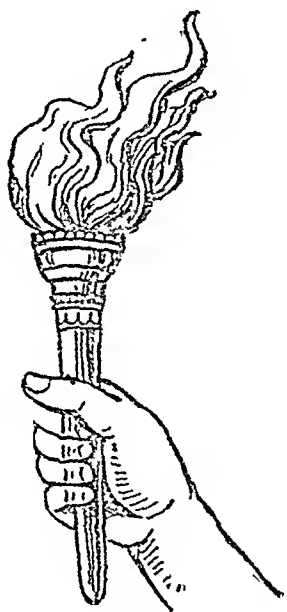
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VOL. III

No. 2

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR:  
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FEBRUARY, 1938

ALL-INDIA FEDERATION OF  
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### Editors' Note

The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments; (d) articles containing statistics and their application to the solution of educational problems; (e) short notices of original works, (f) news of interest to educational workers . . .

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# The Indian Journal of Education

(Edited and Published by the All India Federation of Educational Associations Post Box 52, Cawnpore)

## OBJECTS

- (1) To act as a platform for all matters relating to Indian Education
- (2) To encourage constructive investigation in educational sphere and to stimulate enquiries or those relating to various subjects
- (3) To consolidate a body of those who find it impossible to lead their life about the educational drift of India. Believe that a concern for the health of educational criticism is immediately relevant to the political and economic urgencies of the time
- (4) To provide a mouthpiece for Indian educational thinkers and researchers
- (5) To strive for World Peace and Education

## ITS CONTRIBUTORS

The Managing Editor of the Journal is assisted by an Editorial Board nominated by the Council of the All India Federation of Educational Associations. It comprises of the most noteworthy names in the field. Its contributors include among others the best Indian scholars and artists who can write authoritatively on the subjects.

## ITS SPIRIT OF SERVICE

All work relating to the Journal excepting the printing postage and subscription is honorary and is given in the spirit of service.

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Annual Subscription

Rs 5/ Post Free

Single copy

8 annas Post Free

(The individual members and the constituent associations will receive the Journal at the concession rate of

Rs 3 8 per annum

## ADVERTISEMENT

Ordinary advertisement charges for single insertion are as follows —

Full page Rs 15/-, Half page Rs. 8/-, Quarter page Rs 4/8/-  
Special Rate for long term advertisement

All communications should be addressed to

*The Managing Editor,*  
Post Box 52, CAWNPORE

# Indian Journal of Education

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Vol. III { FEBRUARY 1938 } No. 2

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## THE SECRETARY'S CIRCULAR

The Members of the Federation Council, the Members of the Executive Committee, the Members of the Committees of Sections, the Secretaries of Constituent Associations, and the Individual Members of the Federation: will please note that this issue of the *Indian Journal of Education* contains the personnel of the Federation Council, of its Executive Committee and of the various Committees of Sections. They are requested to find out and note where their names figure, and start activities in that connection as soon as possible. As connected with the work of the Federation they are expected to help it to the best of their power and abilities. I venture to offer below some suggestions which would facilitate our work and make business more efficient and regular:

(1) The Secretaries and Members of various committees should get in touch with one another to take active steps to get some tangible work done by the end of the year.

(2) A copy of the resolutions passed at the last conference is issued as a supplement to this issue. All of them should work for the acceptance of these resolutions by the Government, the institutions and the public in general, and send a report of their efforts to the undersigned by the end of October next.

(3) The Federation has appointed a Representative Committee to consider Mahatma Gandhi's Wardha Scheme in all its aspects and to submit a report to the Council with regard to its desirability and practicability. They should send their considered criticisms and the criticisms of the associations connected with them direct to Mr. P. Seshadri, M.A., Principal, Government College, Ajmer, the Convener of the Committee.

(4) There is considerable ignorance regarding the kind of work which the Federation is doing and this can be easily removed if they

enlighten the teachers and the public by delivering lectures in their locality and by writing in the Press

(5) We should establish more contacts than we have done as yet. If there is no teachers or educational association in their locality we expect them to inspire teachers and educationists to form one and to apply to us for membership. There are many teachers and educational associations which have not yet joined the Federation. If they discuss the Federation with these it will result in their membership. We shall be glad to enrol professors and lecturers of universities and colleges as well as Inspectors and Directors of Education as Individual Members.

(6) There is an idea prevalent among ladies that the Federation belongs to men only. This idea should be dispelled. Any lady teachers or educational association is welcome to join it. Individual lady teachers, educationists and Inspectresses can always join the Federation as Individual Members.

(7) The Executive Committee has undertaken the Endowment Fund campaign for a lac of Rupees. They are requested to act as centres of collections and get printed appeals and receipt books from the undersigned. The rates of collections are 4 annas per primary and vernacular teacher, Re 1 per secondary teacher and Rs 2 per college and university teacher, Inspector or educational administrator.

(8) The Indian Journal of Education is the official organ of the Federation. They are requested to bring it to the notice of the institutions and libraries connected with them and secure orders for it from their libraries.

(9) A copy of the revised Constitution of the Federation is also issued as a supplement to the Journal.

(10) The headquarters will be glad to receive donations as no oblation list could be circulated at the last Conference and as the office is running at a deficit.

All changes in address should be notified to the Headquarters.

D P KHATTY

Honorary Secretary,

All India Federation of Educational Associations  
Post Box 52, Cawnpore

MESSAGES  
OF  
*The Thirteenth All-India Educational Conference*

1

International Federation of Teachers' Associations.  
*Paris, le 15th December 1937.*

Dear Colleague and friend,

The Secretariat of the International Federation of Teachers' Associations, on behalf of its more than 600,000 affiliated teachers of 32 countries, addresses cordial greetings to the Annual Conference of the All-India Federation of Educational Associations.

We were very glad to meet, at the occasion of the International Conference of Primary Teaching and Popular Education held in Paris in July last, Mr. Mukerji, and to establish by this a first personal contact with a representative of your Association.

We sincerely hope that our Associations will continue to collaborate in a spirit of international goodwill of the teachers all over the world.

Next year the I.F.T.A. will hold its annual Conference in Copenhagen and we shall be glad to meet there a representative of your Association. The agenda of this Conference will comprise :

1. International exchange of teachers,
2. Possibilities of passing from post-primary to 'secondary' schools in the different countries,
3. Size of classes and conditions of school buildings,
4. Children's literature and international goodwill.

With our best wishes for your annual Conference and for a further cooperation, we are

Yours sincerely,  
(Sd.) Dumas and Lapierre.  
Secretaries.



The World Conference Committee of the Japanese  
Education Association  
Hitotsu Bashi Kanda ku Tokyo Japan  
September 11 1937

Dear Sir

With the Seventh World Conference of the World Federation of Education Associations successfully concluded and the last of the one thousand foreign delegates from the forty different countries homeward bound I wish to avail myself of this opportunity to thank your Association for their generous support and interest in promoting this great Congress of educators and contributing so much to international goodwill and mutual understanding

The twenty five hundred Japanese teachers who participated in the proceedings with their colleagues from abroad will ever remember the happy associations and the memorable days enjoyed together this past summer

With kindest regards and warmest appreciation

Most gratefully yours  
(Sd) M. Oshima  
Secretary General

Uttarayan  
Santiniketan Bengal  
December 12 1937

Dear Mr. Roy Choudhury

Please convey on my behalf to the distinguished delegates to the Thirteenth All India Educational Conference my greetings. I wish I were able to participate in the deliberations on a subject so dear to my heart. I too began as a teacher of little children in a small school at Santiniketan thirty years ago and I have never ceased to be proud of that part of my vocation. I wish the Conference every success

Yours sincerely  
(Sd) Rabindranath Tagore

4

78B, Lansdowne Road,  
Bhowanipur P.O.

*Calcutta, 19th December, 1937.*

Dear Sir,

I am grateful to you for the invitation to the 'All-India Educational Conference.' I am too ill to attend the Conference personally. I can only pray for its success.

(Sd.) Brajendra Nath Seal, Kt., M.A.,

Ph.D., D.Sc.

Late Vice-Chancellor, Mysore University.

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5

Adyar, Madras.

*18th November, 1937.*

Dear Sir,

As regards suggestions for the consideration of the council meeting, I can think of no more urgent matter for discussion than essential principles of national education for India. Even the Congress Governments seem to find difficulty in knowing what to do, while the Wardha Conference has not really helped us, in fact it may have hindered us. So if our All-India Federation, instead of dealing so much with details, could come out with a Charter of Indian Educational Liberties I think it would go a long way to putting our Governments on the right educational path.

Sincerely,

(Sd.) George S. Arundale.

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6

Senate House, Calcutta.

*18th December, 1937.*

Dear Sir,

I very much regret that I am unavoidably prevented from welcoming you personally on the opening day of your Conference. You will be assembled to discuss some of the vital problems of education which are of special importance during the present stage of our national development. The range of your discussions is very

wide and will include educational problems affecting the primary, secondary and University stages. It is of paramount importance for us to emphasise that no nation can ever attain its full height socially, economically, intellectually and politically unless the system of education provided for a full and harmonious development in respect of all stages of education. Further the task of educational reorganisation affecting the well being of millions of human being cannot be achieved without unstinted financial support from the State. I sincerely hope that unity, reason and fearlessness may mark your deliberations and under the guidance of your distinguished President you may be able to formulate your demands consistent with the advancement of the highest interests of our country.

(Sd) Syama Prasad Mookerjee  
Vice Chancellor  
Calcutta University

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7

University of Rangoon,  
Rangoon December 10, 1937

Dear Sir

The University wishes the Conference all success in its deliberations

Yours faithfully  
(Sd)  
Registrar

---

8

Nagpur the 6th December, 1937

Sir

The Executive Council conveys its best wishes for the success of the Conference

(Sd) U Misra  
Registrar  
Nagpur University

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9

Hyderabad-Deccan.

Sir,

I regret that owing to pressure of engagements I shall not be able to attend but knowing full well the importance of your deliberations for future of my country, I wish the Conference every success.

(Sd.) Sir A. Hydari,  
President, Executive Council.

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10

*Bombay, 12th November, 1937.*

Dear Mr. Khattry,

I thank you for your kind invitation to your Conference on December 26. I am afraid I shall not be able to come owing to other engagements but I shall consider in what way I can help the Conference. I hope it will succeed in finding a solution for the numerous different problems which will come up for consideration.

Yours sincerely,  
(Sd.) B. G. Kher,  
Prime Minister,  
Government of Bombay.

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11

Government of Sind  
General Department  
Sind Secretariat  
*Karachi, 9th December, 1937.*

From

The Honourable Sir Ghulam Hussain  
Hidayatullah, K.C.S.I.,  
Chief Minister to the Government of Sind.

To

The President,  
All-India Federation of Educational Associations.

Sir,

It gives me much pleasure to send you my greetings and my best wishes for the success of the 13th Session of the All-India

**Educational Conference** The subject of Education is of vital concern to the community and a gathering of experts from all over India met to discuss the problems of Education in its different forms must command the sympathetic interest of all who are anxious for the welfare and progress of the country

I trust that the conference may achieve all that it has set before itself and that its deliberations may bear fruit and advance still further the great cause of education

(Sd) Ghulam Hussain Hidayatullah

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12

Educational Commissioner with the Government of India  
Simla

I am very sorry indeed that I am unable to attend the Thirteenth All India Educational Conference to be held at Calcutta from 26th to 30th December next I sincerely wish that you have a very successful meeting

(Sd) J E Parkinson

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13

Director of Public Instruction,  
United Provinces

Allahabad, December 13, 1937

My dear Khattry

I have to thank you for your invitation to the Conference at Calcutta in December and to say that as in past years the necessary steps will be taken to bring this to the notice of teachers Yours resolutions of 1936 are before Government and afford a valuable index of the attitude of the teaching profession towards the outstanding educational problems of the day I trust that the same good sense which in the past has marked the deliberations of your federation may continue to be shown both now and in future conferences With the impending reconstitution of education the resolutions are more valuable and I shall welcome the proceedings in due course

Yours sincerely,  
(Sd) R S Weir,

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14

Officer-in-Charge, Education Department,  
Tripura State.

"All success to the Conference for which we endorse our co-operation for the furtherance of Education in the country."

(Sd.) Satyaranjan Bose, B.A.

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15

Saraswati-Niketan,  
Indore.

*Dated 21st December, 1937.*

Dear Sir,

I heartily thank you for your kind invitation to attend the XIII session of the All-India Educational Conference to be held at Calcutta from the 26th to 30th December 1937 with its attractive, instructive and substantial programme. It would have given me the greatest pleasure if I had been able to accept it but pressing engagements elsewhere prevent me from doing so, which fact I greatly regret.

I am convinced that meeting as the conference does under the patronage of the world-famous and premier University in India, the élite of educationists not only locally, but from all over the country, will meet to pool their wisdom together in order to shed light and, I may add, lustre on many problems of education agitating the mind of the country.

Yours sincerely,  
(Sd.) M. V. Kibe (Sardar).

---

16

"I wish all success to the Conference,"

(Sd.) S. A. Brelvie,  
Editor, *The Bombay Chronicle*.

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17

Mysore State Education League  
District Normal School,  
Tumkur

21 12 37

Dear Mr Khattry,

I am certain this Conference is going to be one of the epoch-making ones in the history of the Federation owing to the wide-spread interest evinced by the Provinces in tackling the problems of education. I very much wish I were present but distance and inconvenience have denied me that pleasure. On behalf of the Mysore State Education League, I heartily wish the Conference success under the guidance of the distinguished educationist, Mr C. R. Reddy whose memory is as green in Mysore today among teachers as it was when he guided them.

I remain,  
Yours fraternally  
(Sd) K S Acharlu  
Secretary

18

Satchidanand Govind Bhuvan,  
Shahupur  
Kolhapur

23 12 37

Sir,

I pray the Almighty to bless this nation building and important conference with bright success to awaken and illumine noble thoughts of love unity and light and lead the suffering humanity from depths of darkness to the heights of glory truth and undivided love for serving humanity to bring the Kingdom of heaven on earth.

Yours truly  
(Sd) R G Shinde,  
Educational Officer  
School Board

19

London Mission High School,  
Gooty (S. India).  
23. 12. 1937.

Dear Mr. Khattri,

I regret very much that I am unable to be with you and take part in the deliberations of the Conference. I trust that during this momentous gathering, after the Congress Governments have been established in most provinces in India, questions of a federal nature relating to education will be discussed and conclusions arrived at thereon. I further hope that the Hindi question as being the lingua franca of our country will also be finally settled favourably from the national point of view. Wishing the Conference every success,

Yours sincerely,  
(Sd.) C. Ranganatha Aiyengar.

---

20

Old Bilaspur, C. P.  
The 25th December, 1937.

Dear Mr. Khattri,

I wish the Conference every success in its undertakings. I am confident that the session is bound to be successful under the able and distinguished presidentship of Mr. C. R. Reddi.

The happy memory of the Nagpur Session is yet quite fresh in me. One realises its necessity and importance only when one attends its various sectional meetings. I do earnestly desire and hope that the conference would do its best to give a lead to our Universities and other educational institutions in the matter of making the country politically conscious, economically self-supporting and educationally enlightened.

I wish once again all success to the conference.

Yours sincerely,  
(Sd.) H. L. Gupta.

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21

New High School,  
Amraoti (Berar)  
26 12 37

My dear Khattrij,

Kindly convey my best wishes to the Conference I am sorry I cannot attend it personally this year

I do hope under the able guidance of the Vice Chancellor, Mr C R Reddi the Conference will be a huge success and its resolutions with the encouragement of the powers that be, will add solidly to the re orientation of Education in general along healthy and national lines

With renewed best wishes

Yours fraternally,  
(Sd) N L Inamdar

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22

Note—Messages of Regret expressing inability to attend the Conference were received from (1) Hon ble P D Raikut, Minister Government of Bengal (2) Mr J C Chattopadhyaya of Jamshedpur (3) Mr B M Tripathi of Balrampur and (4) Thakur Lautu Singh Gautam of Benares

## REPORTS OF MEETINGS

### I. The First Executive Meeting 1937.

The first meeting of the Executive Committee for 1937 was held at the office of the All-Bengal Teachers' Association, Calcutta, at 1 P.M., on Sunday the 29th August, 1937, with Mr. K. P. Bhattacharya, the Vice-President, in the Chair. Mr. D. P. Khattry, Mr. B. N. Chakravarti, Mr. Ramani Mohan Roy, Mr. S. K. Roy and Mr. R. N. Basu attended the meeting. The following business was transacted :—

I. In accordance with Article XI (4) of the Constitution the meeting elected the President of the Calcutta Conference.

II. The meeting drew up a tentative outline programme of the Calcutta Conference for the consideration of the Council.

III. The meeting authorised the Secretary to place, before the Council meeting direct, the suggestions received by him with regard to the topics of discussion, agendas of sectional and general meetings, the names of the Chairmen of the various meetings of the Conference, the draft resolutions and the names of educationists to be invited to read papers.

IV. The meeting postponed consideration of the Scheme of Teachers' Registration Council to the next meeting.

V. Resolved that a committee consisting of (1) Sardar Shitole, (2) Sardar Angre, (3) Sardar Kibe, (4) Mr. M. R. Paranjpe and (5) Mr. K. S. Vakil be appointed (i) to explore the possibility of establishing a course in Civic Administration (useful for administering estates) as an optional subject for Intermediate and Degree examinations; and (ii) to submit drafts of such courses on suitable and practical lines if possible.

VI. The meeting postponed consideration of the steps to be taken for the formation of an Adult Education Association of India owing to the illness of Prof. A. N. Basu.

VII. The meeting considered a statement by the Managing Editor with regard to the financial conditions of *The Indian Journal of Education* foreshadowing a deficit of Rs. 600/- at the end of the year. Resolved that the members of the Council be requested to secure subscribers for the Journal in the vicinity of their jurisdiction.

VIII The Secretary reported that the Endowment Fund of the Association had increased by Rs 114/- and that it was deposited in the Post Office Savings Bank, Cawnpore

IX The Secretary reported certain facts about the publication of the Delhi Conference Report which were noted

X The meeting noted with satisfaction that a large number of Indian delegates attended the World Conference at Tokio under the leadership of Principal Seshadri and that Mr J P Mukerji M Sc LT Headmaster Government High School Cawnpore, represented the Federation at the World Conference at Paris

XI The meeting authorised the Secretary to place before the Annual Council Meeting at Calcutta the proposal of Dr Krishnayya to separate the Training of Teachers and the Experiment and Research Sections and Committees

XII The meeting approved of the proposals of the Secretary with regard to the UP Adhyapak Mandal and the Punjab Teachers Association

XIII The Secretary placed before the meeting the Accounts of the Reception Committee of the 11th All-India Educational Conference held at Nagpur in 1935

Resolved that a vote of thanks be accorded to the Reception Committee for their donation of Rs 100/- to the Permanent Funds of the All India Federation

XIV Resolved that the next meeting of the Council and the Executive be held at Cawnpore on Sunday the 3rd October 1937

XV The Secretary read messages of regret from the following members expressing their inability to attend the meeting —Prof S K Yegnanarayana Aiyar of Madras Principal K S Vakil of Kolhapur Mr V Prasad of Allahabad Mr A R Narayana Pai of Cochin Mr M R Paranjpe of Poona Prof A N Basu Calcutta, Mr T M Chakravarti Jalpaiguri Mr P D Gupta of Khurja Mr Diwan Chand Sharma of Lahore Mr K L Shrinani of Udaipur, Mr Monindra Chandra Mookerjee of Feni

XVI The meeting adopted a vote of thanks to the Chairman, Prof K P Chattopadhyaya

## II The Second Executive Meeting 1937

The second meeting of the Executive for 1937 was held on Sunday, the 3rd October, 1937 at 8.30 A.M., at Pt Prithi Nath

High School, Cawnpore, with Principal S. K. Roy of Ranchi in the Chair. Messrs D. P. Khattry and D. K. Sakhwalkar of Cawnpore, Mr. V. Prasad of Allahabad, Prof. Mannoo Lal Misra of Agra, Mrs. S. Bose of Cawnpore and Principal P. D. Gupta of Khurja attended the meeting. The following items were discussed:—

- (1) The minutes of the first meeting of the Executive Committee held at Calcutta, were confirmed.
- (2) The Teachers' Registration Scheme proposed by Mr. Buch, was discussed and thoroughly revised.
- (3) Resolved (i) that the revised scheme be published for circulation and criticism invited thereon; (ii) that the scheme with criticism be placed before the next meeting of the Executive Committee.
- (4) Resolved that a vote of thanks be accorded to the Chairman, Principal S. K. Roy.

### III. The Second Council Meeting 1937.

The second meeting of the Council for 1937 was held at Pt. Prithi Nath High School, Cawnpore, on Sunday the 3rd October, 1937, at 11-30 A.M. with Pandit Ram Narain Misra of Benares in the Chair. Messrs D. P. Khattry, D. K. Sakhwalkar and K. V. Phadke of Cawnpore, Messrs S. N. Banerjee and V. Prasad of Allahabad, Prof. Mannoo Lal Misra of Agra, Principal S. K. Roy of Ranchi, Mrs. S. Bose of Cawnpore, Principal P. D. Gupta of Khurja and Messrs Gokul Sahai Srivastava and Pt. Ram Krishna Shukla of Cawnpore attended the meeting. The following business was transacted:—

I. The minutes of the first Council meeting of 1937 as printed on pages 17—21 of the Federation Council Number of the *Indian Journal of Education*, were confirmed. The meeting approved the steps taken by the Secretary to give effect to the resolutions passed therein. Principal S. K. Roy intimated that the amount of donation entered against his name on page 58, was on behalf of the Behar and Orissa Secondary Education Association.

II. The Reports of the two meetings of the Executive Committee were considered and the following resolutions were passed with regard to the various items discussed therein:—

- (1) Resolved that the Reception Committee be requested to arrange for some public lectures in the evening on the 27th and 29th December.

- (2) Resolved (a) that the ordinary donation list be again suspended this year and special donations be raised at the Calcutta Conference to meet the expected deficit of Rs. 600/- in publishing the *Indian Journal of Education*, (b) that each Council member be requested to secure subscribers for the Journal
- (3) Resolved that the members of the Council be requested to help actively in the collection of the Endowment Fund
- (4) Resolved that the confidential statement of the Secretary with regard to the publication of the Delhi Conference Report be noted
- (5) Resolved (a) that the scheme of Teachers Registration Council prepared by Mr. Buch and revised by the Executive Committee be published for circulation and criticism invited thereon, and (b) that it be included in the agenda of the next meeting of the Executive

III The suggestions received by the Secretary and the tentative programme prepared by the Executive Committee were considered and discussed and the final programme was framed to be delivered to the Reception Committee

IV The suggestions received by the Secretary with regard to the agenda of the Sectional meetings and the selection of their Chairmen were considered and discussed. The final agenda of each section was prepared and the selection of Chairmen made

V The meeting discussed the resolutions received by the Secretary for the general Session and sectional meetings of the Calcutta Conference and authorised him to deliver them to the Reception Committee as draft resolutions for printing and distribution among Council members. The Secretary was also authorised to receive further resolutions and to place them before the Annual Council meeting as supplementary drafts

VI The Secretary was authorised to include in the agenda any resolutions that he considered suitable to be placed before the annual meeting of the Council

VII The meeting expressed its sense of gratefulness to the Reception Committee of Nagpur for their donation of Rs. 100/- to the Federation funds

VIII. The meeting suggested Bombay and Patna as venues for the Conference of 1938 in order of preference.

IX. The Secretary read messages from the following members regretting their inability to attend the meeting: Principal P. Seshadri of Ajmer; Dr. Ziauddin Ahmed of Aligarh; Mr. T. M. Chakravarti of Jalpaiguri; Messrs R. C. Bhargava and M. M. Guptara of Muttra; Mr. Brahma Swarup of Aligarh; Mr. Ram Swarup Sharma of Srinagar (Garhwal); Messrs Brij Lal and Diwan Chand Sharma of Lahore; Mr. J. C. Buch of Karachi; Mr. N. K. Bhatt of Bhavanagar; Messrs K. S. Vakil and G. S. Krishnaiya of Kolhapur; Prof. A. N. Basu of Calcutta; Mr. K. L. Shrimali of Udaipur; Mr. B. L. Kaul of Gyanpur; Mr. N. Kuppuswami Aiyangar of Trivandrum; Prof. H. R. Bhatia of Pilani; Rai Saheb D. N. Mukherjee of Agra; Mr. A. R. Narain Pai of Cochin; Mr. C. A. Christie of Bombay.

X. The meeting unanimously adopted a vote of thanks to the Chairman, Pandit Ram Narayan Misra.

#### IV. The First Council Meeting 1938.

The first Session of the Council of the All-India Federation of Educational Associations for 1938 was held at the Vidya Sagar College, Calcutta, on Monday the 27th December 1937, at 9 A.M. with Principal P. Seshadri in the chair. About 80 members from all parts of India attended the meeting. As the work could not be finished at one session, a second session was held on Thursday the 30th December 1937, at 8 A.M., in the Senate House. The following business was transacted:—I. The minutes of the 2nd Council Meeting, 1937 were confirmed. II. The Council considered, discussed and amended the draft resolutions and also other resolutions which could not be included in the draft. Resolutions were then selected for being placed before the General Session and the Sectional Conferences.

III. The Secretary's Report for 1937 was read and adopted. In this connection the meeting recorded a vote of thanks to the Secretary, Mr. D. P. Khattry, for the work done by him during the year.

IV. The Financial Statement for 1937 was adopted.

V. The Draft Budget for 1938 was approved.

VI The proposed amendments to the constitution having been withdrawn the Constitution as revised at Gwalior in 1937 was again adopted

VII The following resolutions were referred to the Executive Committee for opinion

- (i) That an All India Publication Fund be started under the control of the Federation for getting books on History and Sciences written and published in different vernaculars of India (Hyderabad Teachers Association)
- (ii) That a Reader be published by the All India Federation with the aim of promoting peace human brotherhood and international goodwill Such a Reader should give brief biographies of men who have won victories of peace universal aspects of culture and a brief history of human effort towards settlement of disputes between nations by avoiding war Such a book may be used in schools all over India and be a source of income to All-India Federation (Principal S K Roy)

VIII The following resolution was referred to the Editorial Board of the *Indian Journal of Education* —

That the *Indian Journal of Education* devote a considerable amount of space to a Readers Digest of important educational articles or publications obtained from as wide a source as possible (Principal S K Roy)

IX Resolved that the Council accepts the invitation of the Bombay Secondary Teachers Association to hold the next All India Educational Conference at Bombay during the Christmas week of 1938 and appoints the following sub committee to take steps to form the Reception Committee (1) Principal H V Hampton Secondary Training College Bombay (2) Miss Kapila Khandwala, 22 B Wellington Colony, Santa Cruz (Bombay) (3) Mr C A Christie Robert Money School Bombay 7 (4) Mr A L Majumdar Dubash Building Vithalbhai Patel Road Bombay (5) Mr S U Shukla Fellowship School Gowalia Tark Road, Bombay

X The Council considered a statement of the Secretary with regard to the *Indian Journal of Education* and the resolution passed by the last Council Meeting in this connection

*Resolved* (a) that special donations be raised to meet the deficit of the Journal and (b) that all the Council members be requested to help in the enrolment of subscribers to the Journal.

XI. The meeting re-elected Mr. D. P. Khattry as the Managing Editor and Publisher of the *Indian Journal of Education* and appointed an Editorial Board and a Board of Management to assist him.

XII. The meeting settled the number and the titles of Sectional Conferences for 1938, elected the Committees of the following Sections and appointed their secretaries :—

- (1) Childhood and Home Education; (2) Primary and Rural Education; (3) Secondary Education; (4) University Education; (5) Vocational Education; (6) Adult Education; (7) Moral and Religious Education; (8) Health and Physical Education; (9) Training of Teachers, Educational Experiment and Research; (10) Examinations; (11) Internationalism and Peace.

XIII. The office-bearers and the members of the Executive Committee for 1938 were duly elected.

XIV. The Council unanimously adopted a vote of thanks to the Chairman, Principal P. Seshadri.



## THE SECRETARY'S REPORT FOR 1937

### Foreword.

It is not the purpose of Federated Education to standardise educational methods and procedure in the different provinces and States of India but to offer intelligent cooperation and helpfulness which will advance the cause in every province or state basing its advancement upon its own traditions, local organisations and general tendencies

The first All India Teachers Conference was convened at Cawnpore in December 1925 and out of this Conference the All India Federation of Teachers Associations was born. The Cawnpore Conference was attended by about 300 persons representing a number of provinces, and indicated that there was a definite need for educational cooperation on the part of several provinces and states. It was followed by Conferences at Patna, Calcutta, Bombay and Madras successively and reached its climax in the successful handling of the All Asia Educational Conference at Benares in 1930. This brought together educationists from most of the countries of Asia and the attendance reached several thousands. The sessions were held in the grounds of the memorable Central Hindu College in a spacious pandal especially erected for the purpose and the efficiency with which our Committees functioned under the supervision of Principal Seshadri and Pandit Ram Narain Misra is attested by the record of the meeting, the attendance, the proceedings and the spirit of coordination and cooperation displayed therein. Our organisation has since then been gradually perfected at Bangalore, Lahore and Karachi where we gave a new orientation to our policy and converted it into The All India Federation of Educational Associations thereby bringing under its wings all organisations and individuals interested in educational uplift. Under the new dispensation we have held conferences at Delhi, Nagpur and Gwalior, and have developed and extended a spirit of broadmindedness of cooperation and service, of goodwill and friendship.

It is a difficult task to arrange a programme for an All India meeting, and in the first conferences our difficulties were inevitably exaggerated and magnified. No one knows who will attend until the eleventh hour and there is not a sufficiently intimate acquaintance with the educators all over the country to determine precedence

and suitability for the various topics under discussion. The programmes are made up very largely through the suggestions of persons interested in our work and we can only incorporate subjects in which a number of persons are interested and in which such interest is expressed. But as the work of the Federation advances and as acquaintance is extended, the task becomes simplified. It is better to evolve our constitution and procedure by establishing healthy traditions and conventions than by advocating drastic changes or pursuing utopias and thus losing touch with the average educational worker through whose hands the mass of our population has to pass. The All-India Federation of Educational Associations is full of potentialities for the future and by organising an annual conference it provides opportunities of contact for all types and grades of educationists and enables them to pool their experiences and resources into one broad stream of educational propaganda.

#### Calcutta and the Federation.

Through all these years of growth and evolution Bengal and Calcutta have been the chief bulwarks of Federation work. The All-Bengal Teachers' Association sent its delegates to the first All-India Teachers' Conference who took an active part in founding the Federation. It was the first association to be admitted to a full membership and ever since 1925 it has stood with the Federation through thick and thin. It is the only financially prosperous teachers' organisation in the whole country and its workers are imbued with ideals of enlightened professional solidarity definitely aiming to promote the welfare of India. It was with the help of this Association and members of teachers of the University and its colleges that we held the 3rd All-India Teachers' Conference at Calcutta, in 1927, under the distinguished presidentship of Sir C. V. Raman. Since then much water has flowed down the Hoogli and the Federation has been greatly strengthened with the help of The All-Bengal College and University Teachers' Association, the Calcutta Corporation and the University of Calcutta. The All-Bengal College and University Teachers' Association is the only association of its kind in the whole of India. Its membership includes a number of the front-rank scholars of the country and its standard of professional efficiency is to be imitated. The Calcutta Corporation sent its Chief Educational Officer, Mr. K. P. Chattopadhyaya, to the 9th All-India Educational Conference at Karachi in 1933, and there has been no conference since then at which Mr. K. P. Chattopadhyaya, the representative of the Corporation, has not played a significant part

in our deliberations. And when Mr Chattopadhyaya is unable to represent the Corporation the Mayor himself has stepped in as the Chairman of the Reception Committee and has demonstrated to the world that the premier Corporation of India yields to none in its deep and abiding interest for the educational amelioration of the motherland. The Corporation has also broken new ground by arranging for a public Reception to the delegates of the Conference thereby proclaiming that the Indian citizen has not yet lost sight of the ancient ideal of respecting and feeding the gurus, the teaching fraternity. The University of Calcutta has not been behind hand in associating itself with the Federation. It sent its delegates for the first time to our Conference at Benares in 1930 and again it sent its Vice Chancellor our respected friend Syama Prasad Mukherjee as its representative to preside over the deliberations of the 11th Conference at Nagpur. The University has also given a substantial grant to the Reception Committee of the 13th Conference whose inauguration may justifiably be termed as the opening of the flood gates of a great educational endeavour. We are meeting at Calcutta exactly after a decade and the occasion is unique because for the first time in the history of our Conference the premier university of India and the premier corporation of the country have joined hands with teachers' associations of Bengal to welcome the Conference and to assist it to a successful conclusion.

### Our Resolutions

The Resolutions passed at the last Conference were duly forwarded to the various authorities in the Provinces and States. The Government of India has been most irresponsible to our resolutions this year. It had not had the leisure to acknowledge them even. Perhaps it has been busy with its own educational meetings of the Central Advisory Committee and has considered its communiques to be sufficient response to all the resolutions passed in the country. It is an irony of fate that while the World Federation of Educational Associations has thought it proper to give a place on its Directorate to the representative of All India Federation, the Government of India is reluctant to give even a seat to it on a Board of Education for the establishment of which the Federation agitated for several years. But response from other sources are encouraging. Most of the provinces have appointed committees for reorganisation of education and they promise to give serious consideration to our views and opinions. Like the precedent established last year I

propose to incorporate a summary of the responses received in a separate note to be published as an appendix of this Report.

#### Meetings of the Council and the Executive.

The Executive Committee held two meetings one at Calcutta and the other at Cawnpore. At its first meeting it elected the President of the Conference and drew up its detailed tentative programme. At its second meeting it revised the scheme of Teachers' Registration Council prepared by Mr. Buch of Karachi. This scheme will be soon published for criticism.

An additional meeting of the Council was held at Cawnpore during Dasehra holidays. This meeting framed the final programme of the Conference and drafted resolutions. It has also made recommendations with regard to the *Indian Journal of Education*.

#### Membership.

During 1936 there were 18 Affiliated Member Associations, 6 Associate Member Organisations, and 44 Individual Members. During the year under report the Punjab Teachers' Association and the Punjab Non-Government Schools' Federation had to cease to be members owing to financial reasons. But the Bombay Presidency Secondary Teachers' Federation is an acquisition and is to be welcomed. The names of three individual members had to be removed owing to non-payment of dues but 33 more individual members have joined the Federation and the credit for their enrolment goes to Principal P. Seshadri, Miss Kapila Khandwala and Mr. A. P. Khattry. The new enrolment includes distinguished educationists like Mr. A. E. Foote, Prof. H. P. Maiti, Mr. K. K. Nanavati, Mr. Kutti Krishna Menon, Miss Qamar Jahan Jafar Ali, Rao Bahadur B. V. Samarth, Mr. J. M. Kumarappa, Mr. E. L. King, Prof. N. K. Sidhant, Rao Bahadur Rangaswami Aiyangar and Dewan Bahadur A. V. Govinda Menon. We have now on our rolls 17 Affiliated Member Associations, 6 Associate Member Associations and 74 Individual Members.

Among the Provinces we have now no constituent association in the Punjab, the N.-W. Frontier, Assam, Delhi, Ajmer and Coorg. We are glad to note the establishment of a teachers' association in British Baluchistan which has decided to join the Federation during 1938. Among the States, Hyderabad-Deccan, Mysore, Cochin, Gwalior, Bhavnagar and Kolhapur have flourishing teachers' associations of their own. Recently a teachers' association has been started at Bhopal and will be soon affiliated to the Federation. The educationists of Travancore, Kashmir, Udaipur, Jaipur, Jodhpur,

Baroda Indore Alwar Kotah, Jhalavar Aundh Idar, Dewas Senior Dewas Junior Tonk and Tripura are requested to start educational associations and to establish more intimate contact with the All India Federation

### Constituent Associations

In the United Provinces of Agra and Oudh there are three associations affiliated to the Federation (1) The U P Secondary Education Association consists of teachers of non Government educational institutions. It has on its rolls about 200 institutions as branches and its total membership exceeds 2500. It has a permanent fund of Rs 3650 and an annual income of Rs 2000. It has a Benefit Society and Credit Society under its control and publishes a Teachers' Diary which is a profitable venture. Recently it has embarked on the hazardous enterprise of supplying its Journal free to the Branches. It had a very successful annual Conference at Moradabad last October under the presidentship of Acharya Narendra Deva when it passed a number of useful resolutions. (2) The U P N G E O Association is an association of non gazetted educational officers and teachers and has formulated a scheme to establish a cooperative society for its members. A Deputation of the Association waited on the D P I in February last and placed before him the resolutions passed during the last two years. The replies of the D P I are favourable and encouraging. The Association awarded this year four scholarships to the sons of its deceased members. Special efforts are being made to collect funds for starting a Central library to contain latest literature on the experiments carried on in the field of education. It is holding its 18th Annual Conference with an educational exhibition at Aligarh under the presidentship of Mr J P Mukerjee who had gone to Paris Conference as our representative. (3) The U P Adhyapak Mandal consists of vernacular middle and primary teachers and it held a very successful annual conference at Cawnpore under the presidentship of Mrs Vyaya Lakshmi Pandit. The Mandal has reorganised its finances and has great potentialities for the good of the country.

The Behar and Orissa Secondary Schools Teachers Association consists of secondary teachers of Non Government High and Middle Schools and has to its credit an Inter School Test Examination for the University Matriculation in which 112 schools participated. It continued to publish and maintain a Teachers Journal which has improved considerably under the guidance of Principal S K Roy.

The Association held its annual Conference in November under the presidentship of Principal Bhateja and discussed, among other things, provincialisation of Government High Schools, reorganisation of the system of grant-in-aid, Revision of the Agreement Form, Reform of examinations and defence and arbitration boards for the protection of teachers.

There are two associations in Bengal affiliated to the Federation: (1) The All-Bengal Teachers' Association held its annual conference and Exhibition during Easter holidays at Jalpaiguri under the presidentship of Dr. Ramesh Chandra Majumdar, Vice-Chancellor, Dacca University, which was a very successful function. It took up 30 cases of teachers either wrongfully dismissed or discharged, and succeeded in getting relief in ten cases. Some of the cases evoked considerable public interest. It lodged an emphatic protest against the Government Circular arranging for the payment of grant-in-aid, in two six-monthly instalments and has got it annulled. It organised a successful public meeting in commemoration of the death anniversary of Rai Saheb Ishan Chandra Ghosh, one of its founders; and also a Deputation which waited on the Chief Minister thrice to discuss the problems of the proposed Secondary Education Board. The Secretary sought interviews with the Vice-Chancellor and the Registrar and discussed with them weighty problems affecting teachers' interests. The approximate income from its publication amounts to about Rs. 5000/- while 42 widows, 2 orphans and 6 teachers received aid from the Teachers' Benefit Fund. At a conference of Teachers called by the Chief Minister to discuss the situation arising out of students taking part in politics, the Secretary appealed to the authorities to handle the situation with tact and moderation. There are 24 district teachers' associations and several sub-divisional associations, all autonomous bodies affiliated to the Association. There are 818 High Schools and 112 Middle Schools connected with it and District Teachers' Cooperative Relief Societies with a total capital of 4 lacs. The Association organises a Physical Training Camp each year for physical training of teachers which is recognised by the Education Department. It also holds District Inter-Test Examinations. (2) The All-Bengal College and University Teachers' Association has applied itself this year to the creation of a Benefit Fund for its members, which is nearing fruition; to the reopening of the question of deprovincialisation of Government Colleges unsuccessfully; and to the problems of secondary education.

The Punjab Non Government Schools Federation held a Conference in April last after a break of two years under the Presidentship of Mr A Yusuf Ali. The Federation has been giving serious attention to the question of Reorganisation of Educational System and of Grant in Aid system. The Association with the Federation has also protested against the undue interference of Inspectors in the internal administration of Primary and Middle Schools.

The All Gwalior State Teachers Association the Scindia Schools Teachers Association the Government Teachers' Union for Berar, and the All India Feudatories Educational Association have been functioning as usual and there is nothing special to report about them.

The Hyderabad Deccan Teachers Association has thirteen branches and over 800 members. Its Central Executive drew up a programme for the monthly meetings of branch Associations and appointed Sub Committees to prepare a report on school hygiene and to frame rules for starting School museums. The reports of both these Committees are very interesting reading. At its monthly meeting the Association discussed diseases common to school children school furniture and equipment personal hygiene mental hygiene and school building. A public lecture was delivered in October by the Medical Inspector of Schools. As usual a school gardens competition was arranged in which Secondary and Primary Schools took keen interest. The Eleventh Annual Conference of the Association will be held in January 1938 under the Presidentship of the D P I when there will be demonstrations in Teaching lectures and Muskhairi. The Association library has been considerably improved while its Quarterly Journal the *Hyderabad Teacher* has been rendering valuable service to the teaching profession. The teachers club also has been functioning creditably.

The Federation of Recognised Educational Institutions of C P & Berar was started in November 1932 and has now a roll of 84 institutions. The D P I has given permission to Government institutions to join the Federation but they have not taken advantage of the permission on a large scale. The Federation has been consolidating its constitution and has been pressing on the Government to start a policy of gradual transference of the whole of Secondary Education to Private management to take over the

whole of Primary Education into its hands, to introduce the double shift system in schools and to reduce the number of papers in English to two. The Federation has an annual income of Rs. 475-0-0 and an annual expenditure of Rs. 112 only and is the cheapest teachers' organisation in existence in the country. It held its 7th Annual Conference at Amraoti under the Presidentship of Hon'ble the Minister of Education which was a great success and which adopted important resolutions for the Reorganisation of Education.

The province of Sind has three constituent associations of the Federation: (1) & (2) The Sind Secondary Teachers' Association and the Association of Heads of Recognised High Schools, Karachi, have been busy concentrating on the problems of reorganisation in their Province. (3) The Primary Aided Schools Association of Karachi has requested the Municipal Corporation to appoint a Medical Inspector of Primary School children. It held a girls' sports tournament in April last in which pupils from 7 primary schools took part. A boys' sports tournament was also held. The Association has requisitioned a representative from the Moga School to give a lecture on teaching illiterate adults to read by the moga system. It is making arrangements for its Annual Conference to be held in January, 1938 in connection with which an exhibition of hand-work and a variety entertainment have also been planned.

The Bombay Secondary Teachers' Association is now a registered body and has appointed local secretaries for every school. During the year under report it organised three lectures, three debates and a symposium on home-work. The members of Association were treated to a free Cinema show through the courtesy of Shalini Cinetone and Peerless Pictures, Bombay, where Mrs. Sarojini Naidu addressed them on "Film in National Life." During the Presidency Conference the members were shown free another picture, through the courtesy of Bhavanani Productions. The Association is preparing a scheme of teachers' register and of Provident fund. Its Journal is a creditable achievement. The total income during the year was Rs. 2494-0-0 while the expenditure was Rs. 1847-0-0 only. The association is to be congratulated on its sound finances.

I am glad to report the formation of the Bombay Presidency Teachers' Federation which has been affiliated to the All-India Federation of Educational Associations. The President is Mr.



Hampton and the General Secretary is Mr C A Christie The Federation and the Association have invited the next All-India Educational Conference to Bombay

The Montessori Society, Bhavnagar has been doing sterling work and deserves imitation

There are two Associations in Cochin State connected with the Federation (1) The Cochin Teachers' Association held its joint assembly under the Presidentship of Dr C J Varkey which was opened by Hon ble Dr P Subbarayan The Mathai Memorial lecture was also delivered The D P I convened a meeting of Representatives of the various associations to discuss the means of attainment of better professional solidarity and efficiency The association has been given representation on the Text Book Committee and will soon start a Cooperative Mutual Benefit Fund (2) The Cochin Women Teachers Association has on its rolls 606 teachers divided into 8 groups The All Cochin Girls Inter-Schools sports and tournaments were conducted under the auspices of the Association with the aid of a Government grant All the groups have had their annual conferences whose general features were model lessons papers and discussions The Association has been granted representation on the Text Book Committee

The Kolhapur Secondary Teachers Association arranged a number of lectures and talks under its auspices The Executive of the Association did valuable work in selecting text books for use in Secondary Schools The Headmasters of local private High Schools frequently met together to make representation to the local authorities about problems of local interest

The Mysore State Education League has 350 members on its rolls and held a successful annual conference in November last under the Presidentship of Rector L Ziliacus The Conference passed resolutions for opening a section for Primary Education for planning Refresher Courses for Middle School Teachers, for introducing morning sessions of schools and appointed three Committees to study the vocabulary of S S L C in Mathematics Science and Geography The Education Department gives encouragement to the League and considers its resolutions sympathetically The League has formulated specific proposals for the teaching of English Grammar in High Schools has prepared a memorandum on the pay and prospects of teachers and has investigated the causes for

failure at the Middle School Examination in English. The League also inaugurated an adult education week in a village near Mysore, where lectures were delivered and Bhajan and Kirtan were demonstrated.

The South India Teachers' Union has formed New District Guilds in West Godavari, Mangalore and Cuddapah. The Seventh South Indian Education Week was held in October last and did valuable work in bringing the activities of school to the notice of the public, and in stimulating teachers to vigorous efforts towards enabling the schools to fulfil their purpose. The Central theme was 'Education and Changing India.' An Educational Exhibition, demonstration of physical activities and Oratorical and Elocution Contests were organised at different centres and attracted a large number of elementary schools also. It was instrumental in forming an influential Reception Committee to arrange for the lectures and discussions by the International delegation of the New Education Fellowship. Mr. Hankin also showed his interesting exhibits. The 28th Annual Conference of the Union was held at Tanjore in May last with Sectional Conferences, refresher courses and an educational exhibition. The *South Indian Teacher*, the official organ of the Union, is well received by teachers and has been playing an important part in extending the influence of the Union. The *Balar Kalvi*, the Tamil monthly of the Union, is mainly intended for the spread of elementary education and is also well received by teachers. The Protection Fund of the Union is also flourishing. We congratulate the Union on the support that it has been giving to the All-India Federation and its Journal. It was a happy thought to celebrate the World Goodwill day on the occasion of the celebration of the Education Week. Among its branches the activities of the Salem District Teachers' Guild deserve special mention.

#### The Committees of Sections.

The Committees of Sections and their Secretaries have done their best to further the objects of their committees and have been considerably helped in their work by the local Secretaries at Calcutta. We cannot be too grateful to our committees and secretaries for the honorary work done by them at considerable sacrifice. In this connection the work of the Secretary of the Rural and Primary Education Section—Sardar A. T. Mukerjee—who has issued two hundred letters and circulars, and has himself borne expenditure of printing and postage deserves special mention. I am grateful to

Prof C R D Naidu for the work done by him as the Secretary of the Physical Education and Health Section

### Individuals

The Individual and Council members have not been slow in furthering the objects of the Federation. The chief among them is Principal P Seshadri who has made it the business of his life to look after this great movement of educational amelioration and to develop it on healthy lines. The Secretariat at the Headquarters are indebted to him for the invaluable help that he has given them and the time and money which he has spent ungrudgingly to make their path smooth and easy. His suggestions have always proved of immense value while his influence has been cast towards improving the work of the Federation. He was the President of the Indian Delegation that visited Japan at the time of the World Conference in August last and he has been praised and appreciated not only by his colleagues in the delegation but by responsible officials of the World Education Conference. We are deeply grateful to him for his continued and ever growing interest in Federation work and pray that he be long spared to foster and cherish the ideals of this organisation in the formulation of which he has been the lion's share.

Dr G S Arundale the President of the Theosophical Society and the President of our 4th Conference has been hard at work endeavouring to strengthen in the public press the essential principles of National Education which he has embodied in a little booklet entitled Education for happiness to be published shortly. He has, also throughout the year been active in connection with the two schools the Besant Memorial School and the Olcott Memorial School.

Dr Ziauddin Ahmed the Vice Chancellor of the Muslim University and the President of our 8th Conference has been taking keen interest in our work. He is specially interested in examination section which he had prevailed upon the Federation to start. I am sorry to report the death of Sir Syed Ross Massood the President of our 9th Conference, who has been long associated with our work and strongly advocated its ideals. His is the first gap in the list of our Presidents and I place on record our deep sense of grief at the loss of a noble patron.

Rao Bahadur Thakur Chain Singh, the President of the 10th Conference, visited Japan as one of our delegates and is always interested in our affairs.

Mr. Syama Prasad Mookerji, the President of the 11th Conference, has already been mentioned for his activities.

Pt. Iqbal Narain Curtu, the President of the last Conference, gave us the handsome donation of Rs. 100/- to meet the deficit of the Journal.

Pt. Ram Narain Misra, who has this session retired from the Headmastership of the Central Hindu School, Benares, is always helping the Secretariat with suggestions and active work. He presided over the Council meeting at Cawnpore and has been chiefly instrumental in securing donations to meet the deficit of the Journal.

Sardar Kibe of Indore has the good of the Federation at heart, makes useful suggestions for the extension of our work and has not only himself given a donation of Rs. 100/- but has also helped us in realising donations from others.

Both the Sirdars—Angre and Shitole—of Gwalior have each given a donation of Rs. 100/- and deserve our warmest gratitude. We are sorry to learn of the accident to Sirdar Shitole and hope he will soon be his usual self again.

Principal K. S. Vakil of Kolhapur and Principal F. G. Pearce of Gwalior have done splendid work to spread the ideals of the Federation and we cannot be too thankful to them for their abiding interest. We are grateful to Mr. Vakil for his donation of Rs. 25.

Mr. C. V. Chandrasekharan has been connected with us for a number of years and has done considerable spade-work in connection with the starting of the Travancore University. He is now the Pro-Vice-Chancellor of this University which is sure to prove of considerable utility in future. The Federation is proud of Mr. Chandrasekharan's association with its work and hopes he will win greater laurels in the future years to come.

Mr. Abdus Salam Siddiqi, the Assistant Director of Education, Bhopal, is mainly responsible for the establishment of the Bhopal Teachers' Association and he deserves well of the Federation.

Mr. Gijubhai Badheka, the Secretary of the Home and Childhood Education Section, has started about 22 organisations for the welfare and education of children in the various parts of the Cutch, Gujrat

and Bombay Presidency. He has held three All India Children's Conferences and is just now making arrangements for a 4th All-India Children's Gathering at Bombay. He is responsible for the celebration of Children's Days. He has arranged a series of lectures through teachers in Cutch and Gujrat for the education of teachers and parents. He has retired from active service from Shri Dakshinamurty Bhavan where he was working as a life member. A purse of Rs 10,000/ was subscribed and presented to him on the 21st November 1937 by Darbar Gopal Das Bhat the President of the Reception Committee of the Haripura Congress. We wish him rest from his labours but continued activity in the cause of Children's welfare.

Sardar A. T. Mukherjee delivered lectures on primary education at different places. He addressed the Nabadwip Primary Teachers' Conference and convened the Nadia District Teachers' Conference. He also addressed the All Bengal Primary Teachers' Conference and was invited by the District Magistrate of Nadia to lecture on Primary Education in the sub divisions of the district. Sardar A. T. Mukherjee has been connected with the Federation for a long time and his interest increases with the passage of years.

Professor Amaranatha Jha of Allahabad University did not only himself give a donation of Rs 50/ but also helped the Secretary in securing donations.

Dr G. S. Krishnaiyya, the Secretary of the Teacher Training Educational Research and Experiment Section, was invited to preside over the Carnatic Education Week in October. He delivered an address on 'Education for National Unity' at the Bombay Presidency Teachers' Annual Conference held at Sholapur. The Madras University has invited him to serve on a committee to plan a second year course for Teachers studying for B.Ed. and M.Ed. He has also addressed a Conference of all the Christian High Schools of the Bombay Presidency. He is a frequent contributor to educational journals and is now investigating the question of Educational Research in India.

Prof. C. R. D. Naidu, the Secretary of the Physical Education and Health Section, has visited many educational institutions in U.P., Punjab and C.P. and has emphasised the need of raising the average health of boys and girls. He has also been giving a series of demonstrations and lectures to parents and guardians. He is preparing a scheme of physical culture for the physical growth as well as for resistance to and prevention of diseases.

Prof. H. P. Maiti of the Calcutta University has been trying to do measurement work in Education in which he has spent a good deal of his energy and money as well. He feels strongly the existence of inaccurate return of age in schools and wishes that the entry of the wrong age in the school register be considered a crime for punishment. He gave two lectures under the auspices of the "Social Hygiene and Child Guidance Society," Calcutta, and four lectures under the 'Parents' League' Udaipur. He also presided at a Teachers' Conference at Udaipur. He has constructed two sets of mental group tests in Bengali, one suitable for the junior ages and the other for the Senior after three months' preliminary experiment, and has been trying to standardise them. He is the Secretary of the Indian Association for Mental Hygiene, Calcutta Branch, and has advised on many cases of problem children in addition to conducting psycho-analysis. He is organising the N. E. F. group at Calcutta and is in charge of answering parents' questions over the children-behaviour-trouble in the *Balhit* of Udaipur.

Mr. N. Kuppaswami Iyengar of Training College, Trivandrum, has been trying by means of lectures, articles and talks to popularise the idea that useful manual work should form an integral part of the education of every pupil from the first class to the University.

Prof. L. R. Shukla of Benares Training College has been busy trying to bring to perfection simplex group tests to suit Indian conditions. He has helped in collecting statistics with regard to translations of Terman's Tests. He is a frequent contributor to Hindi Magazines on educational psychology.

Principal A. V. Kutti Krishna Menon of Zamorin's College, was a member of our delegation to Japan. He is very much interested in the work of the Federation and has sent a number of suggestions for our consideration.

Professor Hansraj Bhatia of Birla College, Pilani, has delivered lectures on Child Education including two broad-cast talks from Delhi Station. He addressed a refresher course of Primary School teachers and has brought out a book on educational psychology in Hindi. He is a frequent contributor to the leading journals and magazines of the country and has been addressing groups of teachers in various places in the Punjab and Rajputana. He has started a publishing house at Lahore, 'The New Era Publishers,' entirely financed by him, and will publish standard books on Education and allied subjects

in English and Hindi. He proposes to start a technical journal for teachers in Hindi.

Mr Shrimali of Udaipur has been trying to develop cooperation between the parents and teachers under the auspices of the Parents League Udaipur of which he is the Secretary. The League also publishes a monthly educational journal named 'Balhit' in Hindi under the editorship of Mr Shrimali and such literature in Hindi and English which helps the parents in understanding the inner nature of their children. The Vidya Bhawan of Udaipur of which Mr Shrimali is the Head Master has given him facilities to conduct mental tests and has also permitted him to take up cases for psycho-analytical treatment which he has been doing.

Miss Kapila Khandwala of Bombay is an acquisition to the Federation. She has not only acted as the Secretary of the Indian Delegation to Japan but has helped the Secretariat the most in enrolling individual members and subscribers to the Journal. She read a paper at the World Conference at Tokyo and delivered speeches in China where she was acclaimed as a friend of freedom.

Mrs Lila M Khandwala and Miss Lalavati Doctor have started the Balmandir Montessori Institution for children at Santa Cruz where in the course of three years they have attracted about 50 children. They had been to Japan as delegates of the Federation and took part in discussions on Education and allied subjects.

Pt Shyam Sunder Misra has established a High School at Bhagalpur without any monetary help from any one else. He is devoting his time and energy to this institution and it is his ambition to make it the most modern High School in the country. He was the Secretary of the Reception Committee of the 9th Behar and Orissa Teachers Conference and is now the Secretary of the Behar and Orissa Secondary School Teachers Association.

Mr K P Krishna Menon of Mannar has organised an All Travancore Private School Teachers Union and hopes to get it affiliated to the Federation.

Prof Dewan Chand Sharma of Lahore gave a handsome donation of Rs 100 for the Journal and has been writing and speaking about the problems of education throughout the year. It is a pity that in the Punjab the teachers have not yet understood the need for organisation.

Mr. K. S. Dikshit of Satara, has been helping the Raiyat-Shikshan Sanstha of the district whose objects are to spread Primary and Secondary education, to create suitable teachers, to train village workers, to open free libraries and to popularise the ideal of earning before learning. The institution has a hostel of 200 inmates, 40 per cent of whom are untouchables. The branches of this hostel are now found at Poona, Bombay and Baroda. The Sanstha has also started a rural training school which is managed by Mr. Dikshit. It has been recognised by the Education Department and is training twenty-five teachers this year. It has a primary practising school attached to it and a free Reading-room. Mr. Dikshit is engaged in carrying on a unique experiment which will surely be watched with interest and sympathy.

Mr. R. N. Basu of Adra, attended our Executive meeting and is keenly interested in our work. He has been helping the Provincial Association of Behar and Orissa a good deal. He has audited its accounts, prepared budget estimates, drawn up a scheme for propaganda and has been of considerable help to its inter-school-test Examination-Board.

Mr. Tarani Mohan Chakravarti of Jalpaiguri has helped the Secretariat by making collections for the Endowment Fund by securing subscribers for the Journal, by persuading individuals to become members and by making the activities of the Federation known in the Rajshahi division.

The life of Mr. Harbhai Trivedi of Kathiawar is one long propaganda for New Education. He has visited the principal cities of Gujerat and Kathiawar, delivered lectures on New Education, held group discussions in Cutch and presided over the second conference of Chhatralayas in Cutch. He was a member of the Indian Delegation to the World Conference and took prominent part in Secondary Education Section. He has established many contacts with educationists in Hong Kong, Singapore and Ceylon and is the President of the Cutch Branch of the New Education Fellowship. He is now busy writing a book on "Japanese Education" in Gujerati.

Mr. A. R. Narain Pai of Cochin was the convener of the Health and Physical Education Section of Cochin Teachers' Conference at Trichur. He helped in holding a two days' conference of teachers of his group when model lessons were given and papers were read. Under his guidance the Gosri Scout Club, the free public room and Library and the Gymnasium have flourished. He is their



founder president and spends money over them. He has organised an athletic association and a Gosi Scout Printing Service which are doing useful work. The Gosi Scout Journal has been published usefully for over 15 years.

We are grateful to Mr K P Chattopadhyaya for not only helping us with advice but for giving a donation of Rs 25.

Mr Manindra Mukerji of Feni is helping the Secretariat by persuading individuals to enrol as members of the Federation.

Prof A V Mathur the Secretary of the Secondary Education Section has contributed articles on educational subjects to journals and has published Part II of his book on Psychology and Principles of Education. He attended the Bombay Presidency Educational Conference and gave a talk on The Wardha Attitude Towards Education.

### The Indian Journal of Education

I am glad to report that we were able to meet the deficit of 1937 with the help of donors whose list is appended herewith. The Journal has met the approval of the educationists and educational associations of India and abroad. Complimentary letters of encouragement and appreciation have been received from Educational Associations of USA, Great Britain, France, Geneva and Germany and exchanges have been offered unsolicited. This year's deficit is less than last year's and I appeal to the members of the Council to help me in tiding over it.

### The Gwalior Conference Report

I regret very much that it has not been possible for the Reception Committee of Gwalior Conference to bring out the report.

### The Secretary's Office

During the year under Report the Secretary had to issue about 6000 letters and circulars and had to publish a Federation Council Number of the *Indian Journal of Education* in place of the old bulletin. The Federation clerk is overworked and deserves increment. It is high time also that we had our own typewriter and Duplicator. At present we are working with borrowed machines free of charge. It is for the Council to improve the financial status of the Secretariat.

**Conclusion.**

In conclusion I have to express my grateful appreciation of the Secretariat of the Reception Committee at Calcutta who have given me cooperation and goodwill, specially Prof. K. P. Chattopadhyaya, Prof. A. N. Basu, Prof. R. M. Roy, Mr. Manoranjan Sen Gupta and Mr B. N. Chakravarti whose assistance and spirit of accommodation have made indelible impression on our minds. I have also to place on record my appreciation of the work done by Prof. D. K. Sakhwalkar, the auditor, for his patient and laborious work in checking the accounts and my brother, Mr. A. P. Khattry, in helping me to prepare the accounts and to discharge my duties as the Manager of the Journal.

## RESPONSE TO RESOLUTIONS

The resolutions passed at the Twelfth All India Educational Conference 1937 Gwalior were communicated to the authorities concerned and their replies are embodied in the following notes

The resolutions about promoting the establishment of an All India Institute of Education and Psychological Research and about the representation of the All India Federation of Educational Associations on the Central Advisory Board of Education have not evoked any response from the powers that be

The Deputy Secretary to the Education Department of the Government of United Provinces informs us that the whole scheme of education is under consideration. He commends to our notice the D P I's annual and quinquennial reports which would be published shortly. The Secretary Board of High School and Intermediate Education U P is unable to place our resolution before his Board owing to its peculiar regulations

The Secretary to the Education Department of the Government of Bengal has requested the D P I to send us the 9th Quinquennial Review on the Progress of Education in Bengal which will be published shortly

The Hon'ble Minister of Education of Bombay Presidency informs us that his Government is engaged in the task of reorganising education in all its many aspects but he finds it impossible at this stage to express any opinion either about the work done by his government or about its attitude towards the question in general

The Registrar of the University of Bombay and the Secretary S S L C Board Madras have only acknowledged receipt of resolutions. Prof H R Dvekar of Gwalior has been informed by the Government of the State that our resolutions are under consideration and that no specific action has been taken on any of them but as the attitude of the Government seems favourable he expects action in the near future. The Headmaster of Lovett High School Gyanpur reports that the Director of Education Benares State has moved adoption of some of our resolutions which are receiving attention

I am grateful to the Syndicate and the School Board of the University of the Punjab the Executive and Academic Councils of

the University of Lucknow, the Executive and Academic Councils of Nagpur University, and the authorities of Mysore University for their valuable opinions on the resolutions sent to them. My thanks are also due to the Prime Minister of Raj Alwar, the Vidyadhikari of Baroda, the Chief Inspectress of Kashmere and the Education Department of Kolhapur for the detailed opinions of their respective Government with regard to our resolutions. I have deeply appreciated the help received in this connection from the Secretaries of All-Bengal College and University Teachers' Association, All-Bengal Teachers' Association, U. P. Secondary Education Association, Bombay Secondary Teachers' Association, Federation of Recognised Educational Institutions, C. P. & Berar and the Association of Heads of Recognised High Schools, Karachi.

The resolution with regard to the promotion of exchange of educational workers and administrators is considered desirable everywhere but owing to difficulties involved it has not been possible to give a practical shape to it in any part of the country.

The resolution in respect of safeguarding interests of workers in educational institutions has been discussed in every province. The U. P. Secondary Education Association has been able to secure agreement forms for heads and assistants of privately managed institutions and also an Arbitration Board to settle cases of teachers. But both of these require improvement. Provident Fund is compulsory for all permanent secondary teachers in this province. The Prime Minister of Bombay has made the announcement that he would definitely institute a Provident Fund for secondary teachers and also that he would, in every possible way, improve the condition and status of teachers in Bombay Presidency. In Sind no determined efforts have yet been made in this direction. The Baroda State has made definite pension rules and regulations in pursuance of the policy underlying this resolution. The rules in the Mysore State are liberal and meet the situation. In Alwar State new gradation rules have been lately framed and seniority lists of teachers prepared. Recently there has been a considerable improvement in the pay, prospects and status of teachers there. The posts of all the teachers are pensionable and there is perfect security of tenure so long as they remain efficient. Efforts are being made in this direction in Kolhapur also. The University of Nagpur is alive to the needs of such safeguards and is preparing a college code to regulate these matters. The interest of teachers are absolutely safe in the University of Mysore.

Our resolution with regard to giving priority to the education of girls and women in future programmes of education has been received favourably. The United Provinces Government is keenly interested in the education of girls and offers them all kinds of facilities to prosecute their studies. In the Central Provinces girls schools get recognition from the Government without much trouble. A College for women which was lately established at Nagpur secured a grant from the Government almost immediately after it was started and receives much encouragement. The Chief Inspectress of Kashmere is alive to the needs of the girls' education and is doing her best for it. In Baroda every possible effort is being made for the advancement of the education of girls and women. In Mysore State due consideration is given to the education of girls consistent with social conditions and financial limitations. In Alwar Raj orders have been issued allowing girls up to a certain age to attend boys' primary schools and it is expected that the number of girl students would increase considerably. The expenditure on Girls' Education in the State has quadrupled during the last five years. The University of Nagpur considers that the progress of higher education among the women of the Central Provinces is not unsatisfactory. The University of Mysore is in favour of giving all encouragement to women's education but not of priority.

The resolution dealing with the equipment of institutions for girls and women has not received approbation in all parts of the country. Many girls' institutions in United Provinces, Central Provinces and Bengal are teaching Domestic Science as a subject for the High School Examination. In Sind most of the institutions for girls ignore or pay very little attention to cookery, laundry and home management and are mostly duplicates of boys' institutions. In Kashmere in each of the two Girls' High Schools maintained by His Highness's Government there is a Domestic Economy Mistress in the grade of Rs. 125-5-150 who gives special attention to these subjects and also to needlework and hygiene. Two teachers have taken a course of training in Domestic Economy held in the Punjab. In Baroda State all Domestic Science subjects are fully attended to in the institutions meant for women. In Mysore State provision for teaching Domestic Science is available only in some of the girls' schools. In Alwar Raj there are arrangements for teaching Domestic Science including cookery in most of the girls' schools. Domestic Science is an optional subject for women candidates at the Intermediate (Arts) Examination of the Nagpur University and a

course in the subject is provided in the Central College for Women at Nagpur, which is the only exclusive institution for women in the University. In the University of Mysore, a diploma course in Domestic Science is under consideration.

As regards the proposal for a planned advance over the whole field of public education the Governments of the various provinces are marking time, awaiting recommendations from their expert committees. In Mysore State there is cooperation between the Local Bodies and the Government. The Local Bodies manage only Primary Education for which Government contribute the major share. Since the Educational Code of the State is strictly followed by the Local Education Authorities there is no restricted planning. In Alwar Raj, more and more funds are made available by the State for the expansion of education, particularly in the rural districts.

The question of the modification of the courses and system of education in order to make the institutions multilateral has been receiving attention at the hands of the authorities concerned. The Congress Ministry in United Provinces, are alleged to be embarking on a radical reform of educational system but have not yet decided anything finally. In Central Provinces, an attempt has been made by the Education Department for collecting information and opinion regarding the feasibility of starting vocational instruction in schools side by side with general education. But nothing has come out of the attempt except "The D'Silva System" of primary education which makes provision for a few handicrafts in the curriculum. In Baroda they have made a beginning in big high schools. The D. P. I. of Mysore State is of opinion that the existing courses in institutions provide scope in this direction. In Alwar Raj efforts are being made to introduce the idea. The State of Kolhapur expects a lead in this matter from British India. The Nagpur University offers a wide option to the students in the selection of their subjects. Well-planned multilateral courses can be introduced only at the cost of existing courses or with the aid of additional funds, of which there is no prospect in immediate future. The University of Mysore has revised its S.S.L.C. Scheme in order to make institutions multilateral.

The suggestion about providing equally for the Humanities, the Sciences and the practical pursuits has been noted by most of the education departments. But a revision and readjustment of existing course has not been undertaken anywhere. The University of Mysore do not consider the suggestion to be altogether feasible.

The problems of introducing the teaching of Sex Hygiene in schools and colleges bristles with difficulties especially as every teacher cannot be trusted with it. In Baroda the Education Department has issued instructions to schools that students should read some important literature on the subject in the upper classes of secondary schools. In Mysore State Biology is taught in High Schools but pure sex instruction is not considered desirable. At Alwar, they are arranging with the State Surgeon for a course of lectures on Sex Hygiene to be delivered in their college. The authorities of Kolhapur consider the matter controversial and lacking unanimity of opinion. The University of Mysore have made provision for it in their B.T. Course.

Whether separate institutions for rural technical and commerce training are undesirable at this stage in education, is a question which every education department is reluctant to answer, as the matter is under the consideration of experts.

The suggestion to compel the authorities of religious institutions to impart primary education to boys and girls of their respective faiths in their respective localities does not seem to find favour with any Government. The D.P.I. of Mysore is of opinion that the grant given to temples etc. is so small that it is not possible for them to provide educational facilities out of the grant. Some of the Mutis and Mosques in the State do maintain religious classes. In Baroda State the primary education is compulsory as well as free. The Government of Kolhapur would like to examine the question in all its bearings before agreeing with it.

The question of making educational institutions residential also is mainly a matter of finance. A fairly large number of institutions in United Provinces has hostels attached to them but the majority of scholars on the roll live outside the hostels. In Kashmere a hostel for girls has recently been opened by a group of aided schools and is being recommended for grant in aid. In Baroda State the residential system is flourishing. In Alwar Raj the residential system is being encouraged and hostels for Rajputs, Bhargavas, Brahmans, Jains and Khandelwal Vaishyas are already in existence under proper supervision and control. The Kolhapur Government thinks the cost of the scheme will be very great.

The use of the film in educational institutions is also dependent on financial conditions. There are a few institutions in United Provinces that regularly use the films as a means of imparting instruc-

tion. The use of the film as a supplementary means of instruction is recognised at Karachi also and a cooperative scheme has been introduced in about 10 High Schools. The Chief Inspectress of Kashmere is of opinion that films would be particularly helpful in that State where the children are cut off from the rest of the world. Most of the girls there have never seen a railway and other such things, and it is very difficult to make them realise what these instruments of civilisation are. For purdah girls particularly, who never go outside their own particular part of the towns, films would be extremely useful. In Baroda, magic lanterns and slides are largely used on different subjects in several schools in accordance with the scheme of visual instruction prevalent there. The Vidyadhikari considers films to be rather expensive. The Education Department of Mysore and the University both realise the importance of the subject but are unable to take up the question owing to want of funds.

The idea of parent-teacher association is slowly gaining ground. There are no regular associations in United Provinces but parents are always invited to meet teachers in school functions. The Vidyadhikari of Baroda agrees with the suggestion and is giving practical shape to it. The Government of Alwar is also keen about it.

Our resolution about establishing child guidance clinics has not evoked much response. In Mysore State, the Sisu Vihar, conducted by Dr. Gopalswamy, for which a grant is given by the Government, serves this purpose.

As regards the establishment of nursery schools for pre-school children, no government considers it a practical proposition at present. In Baroda State the Education Department is running and encouraging Kindergarten and Montessori schools for children below the age of 7 in almost all taluka towns. The matter is also receiving the attention of Mysore State authorities.

No response has been made from any quarter with regard to starting a central institute for training teachers for pre-school education. In Baroda State, provision for subjects like kindergarten and montessori methods is made in the curriculum of training schools, and a Montessori expert has been engaged by the Government.

Our resolution with regard to planning for compulsory primary education has been receiving a good deal of attention throughout the country. Since the Congress accepted office, the Hon'ble Minister of Education for Central Provinces has been making earnest



and sincere efforts to establish primary schools called 'Vidya Mandirs' in almost every village. It is yet to be seen how far the scheme would become successful. In Baroda State, the primary education is already free and compulsory while Mysore State has adopted definite planning. The Wardha Scheme of Mahatma Gandhi and the report of Dr Zakir Hussain Committee are engaging the serious attention of the Congress Ministries as well as of educationists and politicians of other provinces also.

The proposal about the establishment of reading rooms and libraries for rural areas has not been widely discussed. In Central Provinces the Government gives some yearly grants for establishing and promoting rural libraries but no further attempt has been made in this direction. In Baroda the rural library movement has been organised on a large scale. The Education Department of Mysore is not at present in a position to embark on an ambitious scheme in this direction but is giving small grants to libraries and reading rooms of which there is a fairly large number in the State. The Local Bodies are also giving grants to some of them. In Alwar Raj a travelling library has been started in one of the Nizamats and reading rooms opened in some of the villages in other Nizamats also. In the vernacular middle school libraries, books are issued to school-boys as well as to adults.

The question of Governments giving adequate grants to District and Municipal Boards to make primary education free and compulsory has generally been shelved owing to financial stringency. In Sind the year a budget has provided a little increased grant for primary education but adequate grants are missing.

No home work is given to the children of lower primary classes either in Baroda or in Mysore or in Alwar. The other provinces have not paid much attention to this question.

As regards adaptation of rural school courses to rural pursuits and the training of rural teachers most of the provinces are alive to these and have appointed expert committees to make recommendations. In Central Provinces Mr D Silva's Scheme aims at the purpose. In Baroda and Mysore these ideas have already received a practical shape. In Alwar, teachers are encouraged to take an active interest in rural affairs and help in the improvement of rural conditions.

The question of refresher courses for secondary teachers has not received the attention that it deserves. The UP Secondary Educa-

tion Association is proposing to organise some refresher courses this year. In Baroda and Mysore, refresher courses are arranged from time to time.

Definite rules for the constitution and conduct of managing committees of non-government institutions do not exist anywhere. The U. P. Secondary Education Association is approaching the Hon'ble Minister of Education in this connection. The Vice-Chancellor of the Calcutta University has invited the All-Bengal Teachers' Association to submit to him a draft of the rules desired by it. The University of Nagpur has appointed a small committee for the preparation of a college code for the guidance of colleges in the University, but the Education Department of Central Provinces does not seem to be moving in any way in this matter.

No University in India has planned to undertake adult education work in the form of extramural activities. Extramural lectures are arranged by the Universities in U. P., but, as these are all in English only, they fail to produce the desired effect. In Central Provinces these activities are already undertaken by students' societies in some of the colleges to a certain extent only. The Universities of Nagpur and Mysore arrange for Extension Lectures for the benefit of the public as well as the students.

The resolution about opening an Employment Bureau at every University has met the approval of Calcutta University particularly. The Appointment and Information Board of the University seems to be doing some good work in its own limited way. This question is also under the consideration of the University of Mysore. The Syndicate of the University of the Punjab do not consider any action on their part desirable, as the Punjab Government itself was considering the question.

The introduction of Domestic Science for women students at university stage is not a settled fact. The University of Nagpur only has recognised Domestic Science as one of the optional subjects to be taught to girl students.

Our recommendation about establishing a University Grants Committee in each province is not acceptable to any University. It is certainly not acceptable to the University of Mysore. The Nagpur University is of opinion that, as there is only one University in Central Provinces, the fixing of Government grants for the University should remain a matter for direct negotiation between the university and the provincial government rather than for indirect

approach through any committee. The Executive Council of the University of Lucknow has recorded the resolution. The Syndicate of the University of the Punjab is of opinion that the institution of such a committee is not necessary in its provinces.

The question of a programme of adult education is being tackled at different places in different ways. The Congress Ministry in United Provinces is very keen on the removal of illiteracy. Almost 1200 rural reconstruction workers have been appointed and education will be their chief work. The present Ministry in Bengal has directed Government officers in rural areas to devote their spare time to adult education.

The problem of prescribing manual training and educational handwork as a compulsory part of the scheme of studies in schools has been solved more in theory than in practice. In United Provinces these subjects are optional. In Baroda clay modelling, drawing and gardening have already been introduced in the curricula of primary schools. The Education Department of Mysore State is not prepared to endorse the view in its entirety. In Alwar it is proposed to introduce manual training in one school from the next session.

The establishment of model technical schools in every province is more of a dream than a reality. In Baroda the State has already started industrial schools in the districts for technical education.

The establishment of at least one technical and industrial college in each division is also an ideal to be attained in future. There is a technological institute at Cawnpore in United Provinces. A Technological Institute of Science is likely to come into existence within a period of five years at Nagpur. The Baroda State maintains a central technical institute called Kala Bhawan in the capital.

The need for coordination of technical education with other forms of Secondary Education and with regional as well as local industrial activities is not realized in its true perspective, although sporadic efforts have been made here and there to achieve this object. The Education Department of Mysore State is alive to this need and is giving practical shape to its fulfilment.

The encouragement of private institutions for physical instruction suggested by the Conference is a matter for serious consideration. In United Provinces physical instruction is compulsory in schools and intermediate colleges and the help of the private institutions is freely

taken. In Baroda State, physical education is compulsory in all educational institutions and grants are given to private enterprise to encourage physical education in the Raj. The University of Mysore will gradually give effect to a scheme to make physical education compulsory in the University eventually.

As regards due consideration being given to athletes and sportsmen in the matter of appointment in schools and colleges, the opinions are often divided and in practice no partiality is shown to such people. In Baroda State, there is a provision of this kind in the service rules. The Education Department of Mysore will give due consideration to this suggestion, while the Government of Alwar have accepted it. The University of Nagpur is in favour of the proposal. The University of Mysore do not wish to make it compulsory.

In order to improve the physical health of school children physical education is made compulsory in schools of United Provinces. Four special officers are attached to Training Colleges to train teachers for physical education. During the last three years, the High School Education Board of Central Provinces as well as the Nagpur University have prescribed a course of physical education for schools and colleges. In Baroda State, the experts are preparing a revised scheme of compulsory physical education for schools. In Mysore State, efforts are being made to improve the physical instruction in schools and a committee has been appointed to go into the question.

The problems of nutrition have not received adequate attention at the hands of Indian educationists, while practically little effort has been made to combat under-nourishment of school children. In United Provinces a scheme of compulsory distribution of sprouting gram is in vogue and a special fee of two annas per scholar is levied for the purpose. Free milk to poor girls is given in one aided school in Kashmere and the Chief Inspectress would like to see this practice extended. The Education Department of Baroda agrees with the principle of the suggestion and is considering the matter. In Alwar Raj also the question of supplying pure milk and sprouting gram to school children in the capital is under consideration. The University of Mysore are also considering the matter.

Our resolution about establishing personal contact between boys and teachers has been generally approved. In United Provinces, extra-curricular activities of various kinds have been harnessed for the purpose. In Baroda State the scout movement is flourishing.

In Alwar also much is being done in this connection. The Kolhapur Durbar are making special efforts to achieve the object.

The introduction of additional lessons about the lives of saints and prophets of other faiths in denominational institutions has not been accepted as a general rule and no responses have been received in this connection.

In United Provinces there are no public examinations before the end of the lower secondary stage. In Central Provinces the Hon'ble Minister for Education is proposing to drop the High School Entrance Examination even. In Baroda State in Mysore State and in Alwar State no such examination exists.

No efforts have been made to devise standardized mental tests in Indian schools. It is receiving the attention of the Education Department of Baroda.

No definite scheme has yet been brought forward to bring modern literature on education within easy reach of vernacular school teachers. In Baroda State good books on pedagogy are translated in the vernaculars and published under the Sayaji Sahityamala Series by the Translation Bureau of the State. In Mysore State considerable encouragement is being given in this direction and there has been considerable improvement in vernacular literature in recent years. This kind of work is also being carried out in the S. M. T. Teachers' College, Kolhapur.

The University of Nagpur have forwarded our resolution about the necessity of training college teachers doing research work to the Principal of the Training College, Jubbulpore. The Mysore University gives all facilities in this connection. The Vidyadharan of Baroda State is in favour of the proposal but finds the question of expense to be a hindrance.

The teacher training curricula do not pay special attention to the study of the backward child and no one is willing to undertake an experiment in this connection.

A faculty of education exists in the universities of Nagpur, Calcutta, Patna, Benares, Aligarh, Punjab, Mysore, Bombay and Madras. There is a proposal to start a faculty of education at the University of Allahabad.

There has not been much response to our suggestion for celebrating a World Goodwill Day in schools and colleges. The University of Mysore has no objection to participate if a day is instituted.

Our proposal about broadening the syllabus in History and Civics so as to include a study of modern, national and international movements has been accepted by the Director of Public Instruction in Mysore in S.S.L.C. Course, but he does not find it practicable in all grades of schools. The D. P. I. of Baroda is of opinion that this change should be introduced for Higher Education in Colleges only.

# LIST OF DONORS 1937

<i>Names</i>	<i>Rs</i>	<i>a</i>	<i>p</i>
P Seshadri, Esq, M A, Ajmere	100	0	0
Professor Dewan Chand Sharma M A, Lahore	100	0	0
Pt Iqbal Narain Gurtu M A LL B, Allahabad	100	0	0
Sardar C S Angre Gwalior	100	0	0
Rao Bahadur Sardar M V Kibe M A, Indore	100	0	0
Sardar Narsingh Rao Maloji Rao Shitole Gwalior	100	0	0
Sardar D K Jadhav Lashkar	100	0	0
Rao Bahadur Major Bapurao Powar, Lashkar	100	0	0
Raja G R Raywade, C B E Lashkar	100	0	0
Amaranatha Jha Esq, M A, Allahabad	50	0	0
Rao Bahadur L B Mulye, Lashkar	50	0	0
K S Vakil Esq M Ed, I E S Kolhapur	25	0	0
K P Chattopadhyaya Esq M A Calcutta	25	0	0
Rao Bahadur R J Bhude Gwalior	25	0	0
Rao Bahadur M L Khosla Gwalior	20	0	0
A C C Hervey, Esq Ludhiana	15	4	0
Rai Saheb D N Mukerji Agra	15	0	0
H N Wanchoo Esq B Ed, Allahabad	10	0	0
Ram Narayan Misra, Esq Benares	10	0	0
R C Bhargava Esq, B A, L T Muttra	10	0	0
F G Pearce Esq, Gwalior	10	0	0
Dr P V Charpure M D, Bombay	5	0	0
M S Mirza Esq Osmania Training College, Hyderabad Deccan	5	0	0
S Ali Akbar Esq Hyderabad Deccan	5	0	0
J M Kumarappa Esq M A Bombay	5	0	0
C V Chandrasekharan M A Trivandrum	5	4	0
P D Gupta Esq, M A, Khurja	5	0	0
P A Inamdar Esq M A Hummatnagar	5	0	0
Mannoo Lal Misra Esq M A, Agra	3	0	0
A D Deshpande Esq Kolhapur	3	0	0
R G Shinde Esq Kolhapur	3	0	0
L N Mathur Esq Khurja	3	0	0
Miss Indra Raut Bombay	3	0	0
M S Sundaram Esq Annamalai Nagar	3	0	0
Raj Bahadur Varma Esq Inspector of Schools Baran	3	0	0
Mr Wazalwar Superintendent Neil City High School Nagpur	2	0	0
S L Pandharipande Esq M A Nagpur	2	0	0
Total	1225	8	0

# FINANCIAL STATEMENTS, 1937

## I. Federation Accounts

*From 21st December 1936 to 20th December 1937*

### INCOME

### EXPENDITURE

	Rs	a.	p.		Rs.	a.	p.
1. Balance on 20th December 1936	15	7	4	1. Dues of the World Federation ...	68	4	0
2. Arrears of subscription ...	28	0	0	2. Bulletin ...	171	0	0
3. Admission fees ...	25	0	0	3. Postage and Registration (including on Old Reports)	340	9	6
4. Annual Fees (Associations) ...	345	0	0	4. Printing charges including Duplicating with paper ...	123	14	0
5. Annual fees (Individuals) ...	330	0	0	5. Salaries of the clerk ...	180	0	0
6. Interest on Permanent Fund ...	256	0	0	6. Tennis Tournament Prizes ...	25	0	0
7. Interest from Post Office on Endowment Fund ...	18	10	10	7. Expenditure on Committees ...	14	10	0
8. Sale of old Reports	119	9	0	8. Telegrams ...	8	4	0
9. Donation ...	2	0	0	9. Stationery ...	80	5	6
10. Miscellaneous ...	3	0	0	10. Miscellaneous ...	16	10	0
11. Annual fees (Individuals) in advance	10	0	0				
Total Rs.	1152	11	2	Total Rs.	1028	9	0
				By Balance Rs.	124	2	2
Grand Total Rs.	1152	11	2	Grand Total Rs.	1152	11	2

The Details of Government Securities are :—

4 per cent Government Securities 1960—70 of the Nominal value of Rs. 6,400.



## II Endowment Fund Accounts

From 21st December 1936 to 20th December 1937

## INCOME

## EXPENDITURE

	Rs	a	p		Rs	a	p
1 Balance on 21st December 1936	923	9	6	1 Bank Commission	0	4	0
2 Collections made from 21st Decem- ber 1936 to 20th December 1937	144	0	0				
3 Balance of Delhi Report A/c	70	0	0				
Total R	1137	0	6	Total Rs	0	4	0
				By Balance Rs	1,137	12	6
Grand total R	1137	0	6	Grand total Rs	1,138	0	6

N B—Rs 1137 12 6 are in deposit in S B Public Account  
No 78955 in the Cawnpore Head Post Office

Checked and found correct

(Sd) D K Sakhwalkar

MA B Com LLB

Hon Auditor

(Sd) D P Khattry

Hon Secretary Treasurer

20th December 1937

## DRAFT BUDGET FOR 1938

## INCOME.

## EXPENDITURE

	Rs. a. p		Rs. a. p.
1. Balance on 21st December 1937 ...	124 2 2	1. Dues of the World Federation ...	70 0 0
2 Admission fees ...	25 0 0	2. Bulletin ...	200 0 0
3. Annual subscription (Associations) ...	330 0 0	3. P o s t a g e and Registration ...	370 0 0
4. Annual subscription (Individuals) ...	400 0 0	4 Printing charges i n c l u d i n g Duplicating with paper ..	135 0 0
5. Interest on Perma- nent Fund ...	256 0 0	5. Salary of the clerk	180 0 0
6. Interest from Post Office on Endow- ment Fund ...	23 0 0	6 Tennis Tourna- ment Prizes ...	25 0 0
		7. Expenditure on Committees ...	40 0 0
		8. Stationery ...	85 0 0
		9. Miscellaneous ...	25 0 0
		10. Telegrams ...	10 0 0
Total Rs. ...	11,158 2 2	Total Rs. ...	1,140 0 0
		By Balance Rs.	18 2 2
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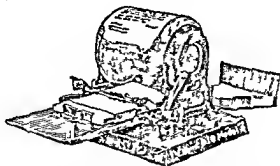
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(Edited and Published by the All India Federation of Educational Associations, Post Box 52, Cawnpore)

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- (2) To encourage scientific investigation in educational sphere and to stimulate statistical enquiries or those relating to experimental projects
- (3) To consolidate a public of those who, finding it impossible to be indifferent about the educational drift of India, believe that a concern for the health of educational criticism is immediately relevant to the political and economic urgencies of the time
- (4) To provide a mouthpiece for Indian educational thinkers and researchers
- (5) To strive for World Peace through Education

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### Editors' Note

The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments, (d) articles containing statistics and their application to the solution of educational problems, (e) short notices of original works, (f) news of interest to educational workers

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# Indian Journal of Education

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Vol. III {

JUNE 1938

} No. 6

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## THE CONVOCATION ADDRESS OF THE UNIVERSITY OF CALCUTTA

By

REV. C. F. ANDREWS.

CHANCELLOR, VICE-CHANCELLOR AND FRIENDS,

You will pardon me today if I speak chiefly to those who are students; for my whole life has been spent in the student world, among the young, and I have a deep love for them which seeks to find its utterance at a time like this in the hope that some word of mine may cling to their memories long after Convocation Day is over. For the same reason, also, what I write will be direct and simple. Need I add that this deep love for Bengal and its students had its origin in my own revered teacher, Gurudeva Rabindranath Tagore? Never has anyone had such a friend and guide as he has been to me!

So let me take, as my main theme, the phrase that Professor Whitehead has set in the forefront of his book, called 'Science and the Modern World.' He has dedicated it thus: "*To my colleagues, past and present, whose friendship is inspiration.*" "*Whose friendship is inspiration.*" It is concerning the transforming power of friendship, between teacher and taught, and also between students themselves, that I wish to speak. For that 'friendship' as Whitehead rightly says, 'is inspiration.'

Let me venture to show you out of my own lifelong personal experience, both as a student and as a teacher, the supreme truth of those words,—how the very best scientific and literary work requires this background of friendship for its highest fulfilment; how the student, or the teacher, who has never made a friend,

has lost the one pearl of great price which the University has to offer how the basis of all sound learning in human affairs is laid in fellowship and friendship

When I look back on my own undergraduate days at Pembroke College, Cambridge, the one permanent and abiding thing that made all the difference to me, was the profound reverence I had for my Tutor, Charles Hermann Prior. He let me enter into his own inner life and shared his deepest thoughts with me. His friendship was my inspiration. He was one of those pure in heart who see God and so he taught me not only the Hebrew of the Bible, but also to look steadily into that unseen world where his own mind had found its rest.

Along with him, was one who became our President, Sir George Gabriel Stokes, the greatest man of science in his own generation, whom men like Lord Kelvin used to call their Master. He was completely unselfish, and would give to his pupils freely his own most fruitful thoughts, in order that they might get the world's praise rather than himself. The undergraduates used to call him "the Angel Gabriel," because in his old age his face was almost heavenly to look at. He was so accessible, that even when he was long past eighty, he would welcome me into his own home, and encourage me to come and sit with him in order to learn something of his spirit.

Then, last of all, there was Edward Granville Browne,—'Persian Browne,' we used to call him,—who at that time had just become world famous in literary circles through his book, 'A Year among the Persians.' So brilliant was he as a linguist, that I have heard him carry on four conversations at once at the High Table in four different languages with perfect ease and without a pause for a word. His room in College, in the Ivy Court, used to be our *rendezvous*, late into the night, while he told us about the East. The debt I owe to his friendship can never be repaid. He turned my face towards India and made the Eastern world a living reality to me. No one in Cambridge understood the spirit of Islam as he did. The admiration, at its highest point, that I have always retained for the Muslim faith, had its early beginning in my friendship with this profound Arabic and Persian scholar.

So I could go on, one by one, to describe my teachers. They were not merely known to us in the lecture theatre. They lived with us and shared our lives. What, in ancient India, I have read concerning the great teachers of those early days in the forest *asrams*, was true in its own degree of these teachers of ours at Cambridge. Their friendship was our own inspiration.

May I dare to tell one other story—not of a teacher this time, but of a fellow-student. Basil Westcott, the youngest brother of Bishop Westcott of Calcutta, and the son of old Bishop Westcott of Durham, was my dearest college friend. He was at Trinity and I was at Pembroke: but we lived in each other's rooms and used to have our meals together and thus met every day. This one friendship with Basil Westcott meant most of all to me in College days. We shared our thoughts and aspirations; we talked over together our life purposes, and were one in mind and heart.

When Basil Westcott had taken his degree, he went out to St. Stephen's College, Delhi, as a teacher, and while he was there he became the closest friend of Susil Kumar Rudra, who was then Vice-Principal. Basil used to write to me every week about the College, and in this way I first got to know his friend, Susil. Then he himself died a very noble death; for while he was nursing a sick patient he caught the dread infection of cholera, and thus passed away. The whole student world of Delhi mourned his loss.

As soon as the news came of Basil's death, I knew that the call had come at last to go out to India in order to take his place. Susil Rudra welcomed me at once as the friend of his own friend, and thus we were brought close to one another from the very start. When later, as the years went on, our mutual affection grew deeper, I caught from Susil the flame of his own burning love for his mother country, India. For love of country was the deepest passion of his life.

Susil had received his education and taken a high degree at Calcutta University late in the seventies of last century. He was much older than I was, and I held him in the highest regard for his sheer goodness. He told me how at one time, in his undergraduate days, he had nearly lost his faith and thrown over religion altogether; but Father Brown, of the Oxford Mission, in Cornwallis Street, had wonderfully befriended him and had saved him from such a great disaster. The daily life of prayer, which the Oxford Brothers led, had restored his own firm belief in God, and this bed-rock faith had gradually become the deepest thing in all his life. It had kept his heart and soul pure as nothing else could do.

There was a quiet dignity about Susil Rudra which never left him for a moment. It gained for him in Delhi the playful name of the 'Burra Sahib': but a gentler, humbler, kinder soul never existed. He was my own Principal for nearly ten years, and it was a supreme joy to me to work under him. Then,



at last, in 1913, he gave me up, without a single word of rebuke or hesitation, so that I might go to Santiniketan, which has been my loved home ever since. How can I possibly tell all that I have learnt there under our Gurudeva !

Let me go back once more to make my meaning clear. If this priceless boon of friendship had not been so bountifully given me in my own early College days, if I had not then learnt what may be truly called the art of friendship, I should never have been able to make friends so easily in Santiniketan itself when I went there from the Punjab. One step led on to another.

What I actually found at Santiniketan when I lived there was the old Cambridge atmosphere all over again,—that close touch between the teachers and the students, those small groups and friendships formed between the students themselves, which is the noblest avenue of learning. Above all, we had in our Gurudeva an ideal teacher, whom we all could love and reverence. Thus we had our own education set in perfect surroundings. Both the teachers and the students lived together and learnt together. Friendship, to quote Dr. Whitehead once more, was inspiration.

The question now arises,—and I confess at once it is very difficult to answer,—“Can these ideal conditions still continue between pupils and teachers, and also among fellow students, in a vast modern city such as Calcutta, where simple friendly intercourse is hampered and restricted on every side by the crowd?”

I would answer tentatively that it is still possible in rare cases, even here in crowded Calcutta; for I have actually seen it, in one instance at least, in the very place where we are gathered today, and I would like to bear witness to what I saw.

During the Flood Relief of North Bengal, many years ago, I used to come, very early in the morning, by train from Bolpur in order to take instructions from Acharya Prafulla Chandra Roy who along with Satis Chandra Das Gupta was in charge of the flood relief operations. I would then go on from him to Sealdah Station. It was easy for me to notice on these occasions, how, in his own Science Buildings, he used to live the life of a true scholar such as India knew and loved of old. For he was clearly in every way the friend of his pupils, sharing with them everything he had, including his own expert scientific knowledge. He would give them all the credit. It reminded me of Sir George Gabriel Stokes at Cambridge over again. His students were his friends, and he was their *guru* and if the noble word of my own scripture is true “Greater love hath no man than this that a man lay down his life for his friends,” then it was true

of him: for he was literally ready to lay down even life itself for those who were his pupils and whom he called his friends.

Again and again, I used to meet him during those days whenever I went to the flooded areas at Santahar, Potisar and Atrai, and what I saw of him was always the same. He lived a life of great austerity and sacrificed all for the great work he had undertaken, building up the science side of the University in that important area of practical Chemistry which had been entrusted to him. No wonder the students themselves flocked to him in order to undertake the work of relief of human suffering in North Bengal, when he himself gave them the stirring call. For they knew that there was nothing which he would invite them to undertake that he was not ready first of all to do himself.

I have taken this example, because it is still living and fresh within my own memory, and it came directly into my own life experience. It showed to me how the very greatest difficulties of a modern city life, like that of Calcutta, could be overcome, if only the human spirit were wholly dedicated to the task.

At this point, I would also record my strong conviction that Sir Asutosh Mookerjee, one of the outstanding Vice-Chancellors of recent times, had the genius to see that in the higher branches of research these ideal conditions between teachers and taught could be repeated in this University, at least among the most brilliant students. For he determined to make Calcutta not merely an examining centre, where thousands of students should sit for examinations, but a teaching University, where studies might be carried on in the higher branches of learning. In this way, it would prove a benefit, not only to India, but to all mankind. With such an object in view, one after the other, new Chairs were founded and lectureships appointed in subjects which should keep India in close touch with the most advanced thought of the day. Here, the classes were necessarily small, and the contact with advanced students thus became happily all the more close. The task of providing funds for this great enterprise was colossal and none but a giant in strength and determination would have attempted it: but his own generosity stimulated others and in this manner very notable additions to the higher life of the University were brought about by his magnificent effort.

Here, also, under Sir Asutosh's wise direction, in the conduct of this higher research work, whether in literature, philosophy, or science, Calcutta University has refused to be provincial. It has chosen its teachers from every part of India,

and all of from other lands for human knowledge knows no local boundaries. The word 'University' itself implies this, and so now you are rightly proud to have had here on your staff not merely scholars from your own country of highest repute, but also such brilliant men as the Nobel Prize Winner, Prof. C. V. Raman, and the Oxford Professor of Eastern Religion and Ethics, Professor Radhakrishnan, both of whom have been invited to come to Calcutta from the South. Indeed, more and more it may truly be said, that although this city has ceased to be the political capital of India, it remains, and is likely to remain, for generations to come, the intellectual capital and centre of the whole country. That, after all, is the greatest distinction which can be given to Bengal—to be the beacon light of learning to the whole Eastern world.

Let me give you one further piece of news which shows how knowledge is universal and overleaps all boundaries. A little more than a year ago, I was in Australia, and pleaded with some success before the Vice-Chancellor and Senate of Sydney University that their rapidly rising School of Oriental Studies should have its own close contact with India as well as with China and Japan, and now I have a good hope that this will shortly come to pass. Furthermore, in Czechoslovakia, steps have quite recently been taken to institute a lectureship in the Bengali Language at Prague, which is one of the most ancient seats of learning in Central Europe. A Bengali from Calcutta University has already been appointed.

This leads me on directly to another aspect of your University life, about which I would wish to offer you my warmest congratulations. For you are, I believe, the first University in British India to break through the unwholesome tradition of making a foreign language the medium of instruction instead of the mother tongue. You have brought back your own beautiful language into its true and rightful place. Indeed, I acknowledge with a certain sense of shame your own kindly indulgence towards me in allowing me to use my own English today as the medium of this address, while only last year the precedent was established whereby the Poet, our Gurudeva, gave to you in his own matchless Bengali the thoughts he had to offer. In my own case, if I must confess it, the simple truth is this, that like most Englishmen I am very bad at languages and came so late to Bengal that I found myself too old to learn. Also my whole life since then has been far too fully occupied to enable me to sit down quietly and learn both to speak and read Bengali as I ought to have done.

But while I have been discussing these things which are so close to my own heart, I have not forgotten for a moment the great bulk of the students of the University who are unable to go on up to the standard of research work in the higher branches of study, but have to leave the University in order to gain a livelihood at a comparatively early age. How are *they* to get something at least of that ideal relationship with their teachers and fellow-students about which I have spoken? Crowded as the Colleges are in the very centre of this great city, with noisy traffic around them all day long, with teachers who live at a distance and come in each day for their work and go out again when it is over,—how, under these conditions, can you really expect to obtain the best that a University is able to offer?

Frankly, it is well-nigh impossible except under rare conditions such as I have already mentioned. One consideration has often weighed with me as it has no doubt weighed with you also. I have wondered whether you have not got to be far-sighted enough, while there is yet time, to move some at least of your residential Colleges out to the suburban area of Calcutta, into less crowded quarters; whether you may not use the modern conveniences of rapid transport in order to get over a part of the supreme difficulty of these vast numbers of city students.

The Christian College, Madras, which Dr. Miller founded, has recently made the plunge and moved outside Madras. This has already met, so I hear, with success. Those who know Tambaram, where the new College has been built, speak about it as a great improvement on the old site in the centre of the City. Motor transport has solved the problem over there. Might it not solve a part of the problem here? At least with some colleges the experiment might be well worth trying.

Yet, while offering this suggestion, I freely acknowledge that the question of congestion in a huge city is much more difficult to solve in Calcutta than in Madras. For the population and crowded area are both vaster. Indeed, it may well be found that just as in the case of New York, Tokyo, or London, a University with Colleges at the centre of the city is inevitable owing to the peculiar character of our modern civilization.

Taking, therefore, things as we find them—Colleges overcrowded, staffs overworked, boarding houses overflowing,—what can be done to prevent mere mass production of University degrees?

Every member of the Senate of this University must have been troubled, as I have been, by this problem. The Education Commissions have not solved it. How can we best face this acknowledged evil?

There is one principle, which may guide our thoughts, because its psychology has been thoroughly tested by experiment and proved scientifically sound. It is this, that the *small* group enables the average man to make his own highest effort at intellectual attainment far better than the large group. For the crowded lecture hall is apt to leave the ordinary student unintelligently passive. He soaks in information like a sponge. He does not "read, mark, learn, and inwardly digest" his knowledge. He swallows it whole. This very simple, but profound lesson which modern psychology has taught us, is now gradually becoming recognised all over the world. When I was lecturing in Cambridge a year ago I found out that all the changes of recent years had been made in this direction. The tutorial system had been fully accepted as sound and it is now in full swing. For it had been scientifically and even mathematically established. Even the number of the small group has been worked out. Aldous Huxley, in his latest book called, 'Ends and Means,' has given a whole chapter to this subject. "A crowd," he says, "is a lot of people. a group is a few. A crowd has a mental life inferior in intellectual quality and emotionally less under control than the mental life of each of its members in isolation. The mental life of a group, is not inferior either intellectually or emotionally to the mental life of the individuals composing it, and may in favourable circumstances actually be superior."

Here then is a psychological principle which may help Calcutta University. The crowded classroom is subpersonal, subhuman, herd like. It does not carry men forward into that sphere of 'plain living and high thinking' which alone can produce the scholar, the artist, the thinker, and the man of affairs.

As a teacher, therefore, I would venture to appeal to my fellow teachers who are present,—Can we so decentralise our work, in different subjects, as to produce in our student world the high psychology of the group rather than the low psychology of the crowd? Can we so arrange our work as to appeal to the individual, the particular, the personal, in our students rather than deal with them merely in the mass? To touch politics for one moment, here surely is the *vital* difference today between the liberal and democratic mind on the one hand and

the authoritarian standard which dictators impose on the other.

If, as teachers, we are determined to carry out this high principle of the group rather than the low principle of the crowd it will mean undoubtedly more giving out of ourselves to our pupils; it will involve our being much more accessible to them. We shall not grudge the hours spent in personal talks; and interviews will never be formal. We shall seek to split up our classes and supervise personal work done by the pupil himself rather than aim at disciplining a vast crowd of students into a forced attention. In all this, we shall come back much nearer to the true personal relation of the *guru* and the *chela*, and be much less of a drill-master and an autocrat.

One last word to the students who are present today. There are voices abroad, both in the East and in the West, proclaiming to the modern world, that the pathway of freedom lies in discarding all outworn inhibitions and aiming only at what is wrongly called 'self-expression.' Self-expression, in the highest sense of the word, is the one goal of Education: it is the one aim of every creative worker. But this result can only be obtained by arduous endeavour. For the perfect mastery which it brings is the final achievement: it can only be attained by seorning delights and living laborious days. Tagore's perfect freedom in lyrical utterance, Nandlal Bose's mastery in the realm of art,—these have come out of a lifetime of genius and effort combined.

When, on the other hand, the phrase 'self-expression' is wrongly used to denote giving way to every wayward passion and yielding to every whim of our lower nature,—the end of *this* is slavery, not freedom: it leads, not to mastery, but to defeat. The friendship, which is inspiration, will always hold the student up, not drag him down. It will help to keep his deals true and high.

One of the wisest words that the East ever uttered has been translated into perfect English thus:

"Keep innocency, and take heed to the thing that is right; for that shall bring a man peace at the last."

And your own poet, in no less perfect English, has given us the immortal prayer:

Life of my life, I shall ever try to keep my body pure, knowing that thy living touch is upon all my limbs.

I shall ever try to keep all untruths out from my thoughts, knowing that thou art that truth which has kindled the light of reason in my mind.

I shall ever try to drive all evils away from my heart and keep my love in flower, knowing that thou hast thy seat in the inmost shrine of my heart

And it shall be my endeavour to reveal thee in my actions, knowing it is thy power that gives me strength to act

---

It is necessary to point out the inadequacies of two generally accepted views regarding scholarship. First, the definition of the highest scholarship which is widely accepted emphasizes specialization far more than breadth. There was a time when the men who were thought of as the most competent scholars were men of extensive acquaintance with the literatures of their own and other languages. It is recognized that the time has passed when anyone can hope to compass the whole or any large part of human learning. Despairing of knowing all things, the present generation has magnified the importance of exhaustive knowledge in a narrow field. So thoroly is the present scholarly world committed to specialization that no devotee of a particular field has the slightest hesitation in acknowledging his ignorance of what is going on in lines of inquiry and thought other than the one which he pursues.

The world owes much to the efforts of specialists. The minute investigations of those who concentrate on a single restricted field of research have added to the sum total of human experience in much the same cumulative way that coral polyps contribute to the building of the islands of the sea. However, modern concentration of attention on narrow fields often results in atrophied personalities. Somewhere in life there must be breadth and comprehensiveness of thinking, and there must be inclusiveness in action which gives full recognition to more than one limited interest. The most productive specialist ought to give attention to the duties of good citizenship and to all that makes life wholesome in the family and in the community.

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—Charles H. Judd

## PRINCIPLES OF ACADEMIC FREEDOM

*(Extracts from the Report of the Committee on Academic Freedom with Henry Lester Smith, Chairman, by The National Education Association, U.S.A.)*

*The Basic purpose of Academic Freedom*—The cause of academic freedom, like the cause of free speech in general, is the cause of effective democracy. Both freedoms exist to promote the rule of intelligence in our democratic affairs.

*How academic freedom serves*—Academic freedom is at bottom the freedom—and obligation—to study and learn, and to share what is learned. It means actual opportunity to study and conclude on the basis of intelligence rather than of any alternative. This holds as truly of student activities as of classrooms and lecture halls. Freedom of teaching exists to promote such intelligent study and learning.

This practice of intelligent study is necessary to the proper working of democracy as of no other type of society. The pupils and students of today as the active citizens of tomorrow must learn to think about vital problems independently, as we say, each for himself, for anything less is not thinking. Academic freedom means, then, the freedom of each teacher in a democratic society to work without interference for the fair-minded study of all pertinent problems by the young citizens under his care. On no other basis can human individuality be well built or democratic affairs be well conducted.

The need for such intelligent study is peculiarly urgent today. In a changing world, with new situations continually arising, the citizens must be continually discriminating between what still remains good and what is now outworn, between what is accordingly to be retained and what has to be remade or discarded. Our young people as citizens-in-the-making must accordingly be learning to appraise the strengths and limitations of our historic traditions and institutions so that, as later need may arise, they can do their part to keep these abreast of the changing need. No custom or institution, however cherished, can in advance claim exemption from this study and criticism. We never know beforehand where conditions may call for re-making. Academic freedom of study, suited to be sure to the



age of the pupil or student, becomes in this way an absolute essential for democratic education in a changing society

*Academic freedom serves still further*—At the very heart of the democratic process lies the factor of intellectual integrity, for without it democratic discussion becomes a sham, and social cooperation a fraud. A democratic education must then foster intellectual integrity as crucial both to its own very essence and to that of democracy itself. The teacher must accordingly embody and express this integrity, for only thus can its growth and acceptance be promoted in others. Any suspicion therefore that the teacher is externally controlled or influenced in reaching his opinions or in expressing them freely must call in question his intellectual integrity and so work against the desired integrity in all whom he influences.

In these and other ways academic freedom of teaching becomes essential to the proper guidance of the young by the old. Without it, neither effectual social intelligence nor essential intellectual integrity is probable of realization. In this way does academic freedom lie at the very heart of any proper teaching.

*Teachers' correlative obligations*—The justification of academic freedom as set out above lies in the kind of study it tends to promote. If a teacher wilfully or carelessly permits some bias or prejudice of his own, or even his carefully reached convictions by the way he teaches them, persistently to mar the process of fair-minded study on the part of his pupil or students, then in like degree may that teacher's fitness to teach be questioned. The principle thus invoked furnishes no basis for the exclusion of any topic or problem from study, but relates wholly to the question of its fair-minded consideration.

*Academic freedom and tenure*—If teachers are to be free from improper outside pressures and so live above suspicion in the integrity of their teaching, they must feel secure of tenure so long as they maintain proper professional standard. Threats to tenure, even when indirect, may put an improper pressure upon teachers to decide their teaching on other than professional consideration. Whether the school shall make its just contribution to our democratic process becomes thus conditioned upon adequately safeguarded tenure. Apart from such tenure, academic freedom can have no assured outlook.

*Academic freedom and community opinion*—In many communities there are parents and citizens who for various

reasons oppose the teaching of controversial issues. Prudence and a just consideration for the feelings of others might therefore conflict with the teacher's positive duty to teach adequately the youth under his care. What to do will vary with conditions. As a rule, intelligent tact will serve better than downright conflict; but there are times when a resolute stand must be taken against unwarranted interference, even at the expense of personal sacrifice.

*Lay censorship of teaching materials*—Adequate teaching, especially in the social area, will involve the use of suitable reading materials. Any external restriction placed upon the choice of such suitable books or other reading materials is clearly an interference with proper study and teaching. When, therefore, schoolboards or other lay authorities censor or prescribe what reading materials schools or teachers shall or shall not use with their classes, they violate the principles of academic freedom and interfere with the presumptively best preparation for democratic citizenship. Existing laws often grant to lay bodies the legal right thus to interfere. It is the moral and social propriety of exercising this legal privilege that is here called into question.

*Teachers' rights and correlative duties as citizens*—Teachers are citizens and have the full legal rights of all citizens. This includes the right to freedom of speech and the right to live their own lives within the law as to them shall seem wise. From these considerations teachers have the same legal right as other citizens to express publicly any opinion they may hold, to ally themselves with organizations of their own choosing, and otherwise to take part in political campaigns and the like. But teachers have duties as well as rights. In fact, rights are never absolute, but are always to be exercised with due regard to all their consequences. In particular, the exercise of a teacher's rights as citizen should not interfere with the proper discharge of his duties to his school. What constitutes interference will differ from community to community. No one rule can be laid down. The general test will be the actual educative effects, upon the pupils and others, that follow from the conduct of the teacher outside of school hours. The good teacher will be sensitive that these effects be not bad.

*School officials and academic freedom*—The out-of-school rights of school officials stand on much the same footing as those of teachers discussed above. School officials have all the rights of other citizens, but like teachers they, too, should not allow the exercise of their rights to interfere with their school duties

reasonably considered. It may happen that public pressure in tendency or fact, will force school officials to refrain unduly from exercising their citizenship rights, or that such pressure may force them as officials to put improper restraints upon the teachers in their schools. In either such case academic freedom is in a true sense threatened, and the principles formulated above for teachers come therein to apply also to school officials.

*Trials on academic freedom and other related charges*—The foregoing principles of tenure and academic freedom are not intended to afford protection to a teacher or other educator against any legitimate charge of professional incompetency or unprofessional conduct. The educational profession should be sensitive to the obligations herein imposed to help root out such incompetency or unprofessional conduct. However, so great are the dangers to academic freedom that may be concealed under charges of incompetency or unprofessional conduct, and so prone are laymen to discount the need for academic freedom, that all trials or hearings where academic freedom is a possible factor should, if the accused so wishes, be publicly conducted. Due notice should always be given, with charges precisely formulated. And legal provision should always be made for the professional peers of the accused to share in the actual decision.

—*The Journal of The National Education Association, U S A*

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## TRUE TO TRADITION

The recent death of Dr. Sarat Chandra Chatterji, the Bengali novelist, has removed an outstanding figure from the sphere of Indian literature. Some of his novels have been translated into many European languages. True to the tradition of the highly intellectual man's love for tea, Dr. Chatterji, according to one of his biographers, "was an inveterate drinker of tea, sometimes taking more than 30 cups a day."

—*From Tea News and Views published by The Indian Tea Market Expansion Board*

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## VISTA OF PEACE

BY  
ROSE NOLLER

Peace is a pattern planted like a seed  
In every man, with tendrils climbing into light,  
And roots that reach into the subsoil of his night;  
Pattern defined, though chaos thrust its rooted weed.  
Peace is all patterned, though it has no creed;  
It was man's cry through ages' plunging plight,  
His white desire in fear or pride; in thickest fight  
It reoccurred unheard in song, mysteriously keyed . . . .  
Evolution is the upward stepping *time* of life,  
But deep and far, beyond this outer shadow pageantry,  
Beyond the backward and the forward moving stress and strife,  
Is *Peace*,—the eternal, changeless ancestry:  
From this beginning shall time bury arms and knife,  
From this grows man's triumphant destiny!  
How far the aeons stretch with war and blood!  
How grim the sightless eyes, the shattered limbs,  
The haunted, trouble-weighted interims.  
How lost all starry rays in hopeless mud . . . .  
Yet strength creeps up like lively springtime bud,  
And rugged revelations crown despair,  
While vistas, glimpsing clear the goal foursquare,  
Arise with hope and struggle from time's flood . . . .  
Man, by his own Will, shall lay the plan.  
He shall make laws, with understanding build,—  
Frustration yet shall have her warlike span,—  
But this same *time* shall see all prophecy fulfilled:  
So, it was destined before the world began,—  
*All Hail! The bright-starred Brotherhood of Man!*

—*World Order.*

# INTERNATIONAL UNDERSTANDING THROUGH EDUCATION

BY

Principal P SESHADRI, M A

*(An Address Delivered at The World Conference on Education)*

I deem it a great privilege to be called upon to speak on one of the primary aims of the World Federation of Educational Associations, the promotion of international understanding through education. My first duty, however, is to convey to this large and distinguished gathering the cordial greetings of the country from which I come—a country containing, perhaps, the largest population of any land in the world today, representing as it does more than three hundred and fifty millions of people, or one fifth of the entire race of mankind on earth. In my double capacity as representative of the Government of India and President of All India Federation of Educational Associations, I wish to convey to this conference our goodwill and best wishes for its success, before doing anything else.

It is a great pleasure for me and Indians generally, to come to this country of Japan. I may venture to add that it is not exactly a foreign country but almost a second home to us, connected as it is with us by numerous ties of culture and civilization, starting with the memorable time when the message of Buddha travelled all the way from my country through China to the shores of this land. During the last few days we members of the Indian delegation have been in this country, with its great traditions of hospitality, we have enjoyed very much going up and down this beautiful land and meeting her interesting people. One reason why we feel proud of being in Japan, is the fact that Japan has done a great deal during the last few decades to raise the prestige of Asiatic nations and it is the only Asiatic power today, held in respect by the other great political powers of the world. It also delights us to be in a country which has done so much for the advancement of the education of her people.

Speaking on the subject of the promotion of international understanding through education, I may, perhaps, emphasize the fact at the every outset, that if only the educators of the world started the campaign of international understanding in all seriousness, it may be accomplished, if not today, at least in a

few decades. Teachers of the world assembled in conference, may I invite your attention to the famous words of Ignatius Loyala, the illustrious founder of the Society of Jesus, who was fond of saying, "Give me the children of the country; I will not bother about what happens to the rest." So long as we are able to propagate the principles of international understanding in the schools and colleges with which we are connected, we need not despair of a good future for mankind.

I am, always, fond of telling a story from one of the classical dramatists, Terence, a name which will be recognised by at least some teachers present in this audience. In one of his plays, with the rather difficult title of *Heuton Timorumenous* or the self-tormentor, there is an interesting character, an old man who went about worrying himself very much about things that did not concern him. He was very sorry that somebody's wife was dead in another street, another man's calf had been killed somewhere else, or somebody's baby was ill somewhere or other. He was asked, "Why are you worried about things which do not concern you at all?" Then came his reply, a very famous sentence in the history of the world's literature, because the old man turned round and said, "Nothing that concerns man can be a matter of unconcern to me," or in other words, "Everything that concerns man, concerns me." If only we, the teachers of the world, realise that everything, that concerns man, concerns us and make our pupils recognise the unity of the human race, we shall have gone forward a long way in the direction of promoting international understanding.

A very well-known English poet, Rudyard Kipling, is often misquoted as a prophet of separatism. Many of you know those famous words of his:

"East is East, and West is West, and never the twain  
shall meet."

But these lines occur, as is not generally known, in a poem in which he intended to emphasize the oneness of humanity, because the lines which follow tell us:

But there is neither East nor West, Border, nor Breed,  
nor Birth,  
When two strong men stand face to face, tho' they come  
from the ends of the earth.

Kipling, unfortunately, died the other day creating a gap, at least in English literature. But if he was present at this large gathering of the people of East and West, perhaps, he would

have exclaimed, there is neither East nor West, when the teachers of the world meet face to face at the International Conference in Tokyo<sup>1</sup> If any proof were needed, one has only to notice there are thousands of teachers here who have come from the ends of the earth, meeting on terms of absolute friendship Members of our profession who see the teachers from other parts of the world, realize that, after all there is not so much difference between one country and another as we are sometimes apt to imagine

During the course of one's travels round the world, one is interested very much in the wonderful unity of the human race For instance, there is no such thing as Persian charity, or Indian truth, or German kindness, or English mercy All these fundamental qualities of humanity are common and so also our frailties It might be a white, pale face devoid of colour, it might be a yellow face with high cheek bones, it might be a brown face with almond eyes or a black face in some other part of the world But let me assure you that the same spirit underlies all humanity Unwise is the man who tries to emphasize the differences among the races of mankind, and great is the man indeed who can lay the proper stress on the oneness of humanity

There are unfortunately some people who pride themselves on the alleged purity and superiority of their race, but anybody who has studied the history of nations, knows there is no such thing as racial purity left in this world, because there has been a continual mixture of races among men and superiority is mostly due only to the presence of opportunities in one case and their absence in another There is no reason why the most depressed people among mankind might not rise to the highest levels of intellect and character, provided they are given adequate opportunities for such development Similarly, it appears futile that people should claim superiority of blood to other classes living in their own country The story is told of Lord Byron in his younger days, when he was a boy at school, that he was conceited and snobbish He was a Lord and therefore he always told his class mates that there was blue blood in his veins One day a class mate happened to quarrel with him, he gave him a strong blow on his nose and blood trickled down, when boys exclaimed, "We find your blood is red, it is not blue!" The blood of all people is red, the blood of no people is blue It is, therefore, very unwise to speak of the superiority of one race over another or the superiority of one class over another

There is special appropriateness in my appearing on the programme of this evening I come of a race which has always emphasized the ideals of international peace and brotherhood as

one of the fundamental doctrines of our religion. No religious prayer in India is complete without the concluding words "Om Shanti, Shanti, Shanti!" which means "peace, peace, peace." No benediction in my country is complete without a formal ending of words to the effect, "May all the people of the world be happy and prosperous!" At a wedding, for instance, it is not the couple alone who are blessed—there are invariably the words, "May all humanity be happy and prosperous!" This is done on every occasion when there is an auspicious ceremony in the family. Coming from such a country, it is a great pleasure for me to add my cordial support to the great need for the promotion of international understanding through education.

Some of you, engaged in the work of teaching—I expect most of you are—may, perhaps, ask, 'how shall we promote international understanding through education?' For several years, I used to serve on a committee of the League of Nations in Geneva, called by the somewhat embarrassing name of the Educational Experts' Committee. One of our duties was to advise the League of Nations about the methods for propagating the principles of the League among the younger generation of mankind in all the regions of the world. We sat for several days every year under the distinguished chairmanship of the well-known English scholar, Prof. Gilbert Murray, to consider, how we shall promote international understanding through education. I may, perhaps, take up a few minutes speaking on some aspects of this question.

Our chairman, Dr. Paul Monroe, told us only a few minutes back very wisely, that one of the reasons why the people of the world do not appreciate each other is ignorance. In fact, philology will give us striking evidence of this fact. Most of us know the word, 'Barbarous,' which comes down from the Greek times, but only a few of us know the derivation of the word, which means "unknown or strange." The Greeks thought that all unknown people were barbarous. It often happens that when we do not know people, we have all kinds of prejudices against them. There is also an English word which confirms the same truth. The word 'uncouth' comes from an old word meaning 'unknown.' But it has unfortunately come to mean 'rough, uncivilized, or rude.' When you call a man uncouth, you really mean by derivation, you do not know that man—it is therefore unfair that you should consider him crude only because you do not know him. Many of us, no doubt, before we came to this country had various prejudices of our own regarding the people of this land. But, perhaps our fortunate stay here has been



enough to remove some of our prejudices and we all go back from this land, I am sure, with the satisfaction of having known some of the good aspects of Japanese life and civilization, not from books but from actual contacts with the people

In almost every subject taught in schools and colleges, it is possible to keep this principle in mind, and train young people to appreciate the good qualities and achievements of other races of mankind. A special responsibility lies on the department of Geography which furnishes admirable opportunities for training people in appreciation of all that is great in other countries. Pupils must be made to realise that theirs is not the only great country in the world. An English writer tells us of a country squire who had not travelled widely, but had only gone to London a few times. He thought that England had the longest rivers and 'the tallest mountains in the world'. Geography must be a good corrective to this attitude of mind. Luckily, the teaching of Geography has advanced so much in recent years that it is no longer a mere string of names to be memorized by the unfortunate pupil. Taught well, it is largely humanistic, and must lead to an appreciation, not only of beautiful aspects of nature in other countries, but also of the daily lives and civilization of the people.

The subject of Art, again, taught as a means of realising all the great achievements of the world in masterpieces of beauty, must also lead to the promotion of international understanding. The great art of the world is due to not one particular country but to the contributions of all.

Literature should furnish similar opportunities in large measure. Beauty, as expressed in the best literary masterpieces of the world is the result of a large co-operative effort on the part of the great men of all humanity, and is not the manifestation of the abilities of a single people. They are composed of the work of diverse nations, for we have the clearness and vitality of Homer, the stateliness of Virgil, the religious depth of Dante, the wonderful understanding of human nature by Shakespeare and the philosophic profundity of Goethe. The total of these achievements could not have been reached anywhere near, but that God in His generosity had scattered genius all over the world with prodigal hand, without confining it to any so-called chosen people. Thorough understanding of great literature must, of course, always include a knowledge of the great masterpieces of the world, even other than those of one's own country, at least, in translations if not in the originals themselves. It may be too early to practise this in the case of children in schools, but

opportunities will certainly arise in the case of the advanced students at the universities to insist on such a wide outlook.

It is, however, in the teaching of history that there is the greatest scope for the teaching of international understanding. In the Educational Experts' Committee at Geneva, to which I have already made reference, we formulated a number of recommendations which have a profound bearing on this subject. One of our proposals was that all the history text-books of the world should be revised, so as to eliminate traces of racial bitterness. It is not that text-books for children should be colourless and devoid of patriotic enthusiasm, but that children should be taught to appreciate the heroes of not only their own country but of others, and sentiments likely to engender ill-feeling should be carefully avoided.

This reminds me of a story told of a Scotch lady in the days of Britain's wars with Napoleon. Somebody happened to mention to her that the French people were praying for the victory of Napoleon. She turned round and asked, "What? How could they pray? Does God understand French?" The good lady honestly thought that God understood only English and not French, and He was apparently for the Britisher only and not for any other people on earth. It is also desirable to present history to young children, not as a mere pageant of bitter fights among the people of the world, but as a record of man's achievements in peace and civilization.

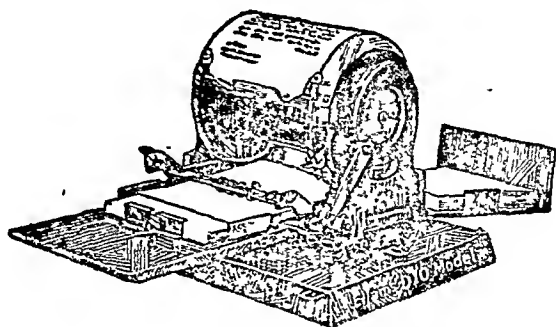
One of the greatest problems with which we are confronted in my own country, is the multiplicity of religions often leading to illwill among the people. It is not a matter on which we congratulate ourselves, but the mere fact that there is a multiplicity of religions in the world, need never be a bar to the promotion of international understanding. After all, it is good to realize that religious revelation cannot be the monopoly of one people, and teach the principle that there may be many approaches to God. One of the great tenets of my own religion is that God is one, though He may be called by many different names. Our scriptures have proclaimed, repeatedly, that just as many roads lead to a great city, many faiths lead to the same God. As the same sun is reflected in many waters, the same God can be discovered in many religions. Like the string running through the many pearls of a necklace, the same God is in all the religions of the world. This is a lesson which must never be forgotten in the class-room.

Travelling in America the other day, I happened to be in a Parlour Car, talking to a Negro attendant on a Sunday morning.

He had just said his prayers, and was reading the Bible with a devotion which many of his betters could emulate. I was apparently so nice to him, that he asked me if I was a Christian. I told him that I was not a Christian, but a Hindu, but the boy said with a happy smile, 'But you look like a Christian!' I should be, similarly, able to say when I look at a good Christian, 'you look like a Hindu, for so long as the qualities prized by mankind are there, it matters very little what religion they profess.'

A common mistake which people often make is to imagine that there is some kind of necessary conflict between nationalism and internationalism. Rightly understood, however, it is not so, as true patriotism is only a step in the direction of universal brotherhood. As Rudyard Kipling has said, God gave all men all earth to love, though "he ordained for each, one spot should prove beloved over all." It may be that you and I are very fond of the places and the sights of the places to which we belong, but that does not necessarily mean that we should be incapable of appreciating beauty in other parts of the world. If I am proud of the Taj Mahal at Agra, I can also be fond of the Parthenon at Athens. If I admire the Himalayas of my own land, I need not be lacking in appreciation of the grandeur of the Rockies on the American continent. If I appreciate the grace and charm of the women of my own country, I can also be an admirer of beauty even elsewhere in the world.

I should like to commend to you in conclusion, that it is necessary in the best interests of mankind to instil this sense of international understanding in the young people all over the world. It is a mistake not to love one another, because we happen to be different in colour or feature, or happen to live on either side of a boundary which is sometimes not even a river or a mountain, but an entirely imaginary line. I have no doubt that teachers have an important part to play in this work, and let us hope that when the time comes for a consummation of this ideal, these periodical world gatherings of teachers will be found to have played no mean part in the achievement.



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# EDUCATION FOR A NEW WORLD ORDER

BY

GENEVIEVE L. COI

(Adapted)

Men and women who are now attempting to further the oneness of mankind often find themselves handicapped by the habit of thinking of some groups as inferior and of others as superior. It is very difficult to consider ourselves as equal members of one great social organism. When we try to discover the reasons for this difficulty, we find that most of us have been *badly educated* for cooperation. We may have had parents who have conscientiously given us the best training they could, we may have gone to excellent schools,—yet we have formed the habit of thinking in terms of inferiority or superiority, rather than in terms of *equality*.

We are therefore faced with the question,—How can we educate the next generation so that the amount of fellowship and cooperation in the world will be greater? This is the most fundamental problem which all real education must meet, whether it is the training of the home, the instruction in the school, or the guidance of religious group.

The distinguished Austrian psychologist, Dr. Alfred Adler, has said that man faces three fundamental problems in life. The first is the problem of occupation,—the means of providing the physical necessities of life. The second is the problem of association with one's fellowmen,—ways of living happily and helpfully with all the people one meets in the course of life. The third is the problem of love and marriage,—ways in which we meet the fact that mankind is created in two sexes. Only as humanity learns better techniques of cooperation can these three problems be solved in a way that will produce a race of healthy and happy human beings.

To the above problems may be added that of the way in which man relates himself to God. The man who truly reverences God as his Creator must also respect and value every other individual because all have come from the same Source. From this spiritual faith, therefore, he receives an added impetus to work for a kind of education which will increase understanding, cooperation and fellowship.

The ideal school, then, makes its first obligation that of helping children to become more cooperative and, conversely, less competitive. It believes that young children can be taught to live in such a way that it is "second nature" to be a *help rather than a hindrance* in all their contacts with other children and with adults. It is convinced that the results of education should be groups of young people who find value and happiness in contributing to society, rather than in seeking to find people who will contribute to them. It is certain that education has failed in its task when boys and girls are guided by feelings of inferiority or superiority to others, rather than by a sense of being an equal member of a cooperating group.

When children enter school at the age of five or six they differ greatly in their ability to work constructively with teachers and other children. The intelligent teacher knows that these differences are due not to some *innate* strength or weakness, but to the fact that some homes have helped the development of co-operation, while others have hindered it.

The most important part of a child's education is that carried on by the mother in the home during the earliest years of life. Ways of looking at the problems of human association which are formed before the age of four or five can be changed later only with great difficulty. We should therefore ask what are the chief errors which parents are likely to make in their education of little children.

One of the most serious mistakes which parents make in training small children is that of *doing too many things for them*. A baby can be a help to his mother by the way he behaves when she is washing or dressing him, by the way in which he eats his food or goes to sleep. But the mother herself must wish to co-operate with the baby, rather than to dominate him, if such habits of helpfulness are to be formed by the child. Boys and girls of three and four should be encouraged to help dress themselves, to pick up their toys, to be thoughtful of the possessions and feelings of others. But the child who is pampered, who has everything done for him, cannot develop habits of helpfulness. Instead, he learns to whine or cry when his mother or father fails to make him the center of the family life; he has a temper tantrum when a brother or sister is treated as though of equal importance with himself. Gradually, all his creative energy is directed toward the goal of being *more important* than others, and he strives to accomplish this by pressing others into his service in many different ways. Some pampered children strive for superiority by simulated illness,

others by means of mischievousness. Running away is a method used by some children, in order that other people will be more attentive to them. To "have what I want when I want it" is the goal of the "spoiled" child. Children who have been reared in this way will seldom become the kind of adults who are able to cooperate in the work of building a new social order.

Fathers and mothers who pamper their child in the hope of making him happy are actually preparing him for unhappiness and defeat in his adult life.

Less frequently, perhaps, a child is trained in non-cooperation through the hatred or neglect of parents. A baby which is not wanted at the time of its birth will sense the mother's rejection of it, even though the mother consciously "tries to love it". Sometimes conflicts between the husband and wife will make one of them dislike a child, and this is certain to affect the child's outlook on life. Adler summarizes the problem of such a child as follows, "The hated child is in the worse position of never having been spoiled by anyone. Its goal is to escape and to get at a safe distance from others. Such a child is often unable to look one straight in the eyes, cannot speak, and hides its feelings in fear of abasement. The unusual tension of their life makes these children postulate a higher goal of security and superiority than that of the average child."

It is evident that the boy or girl who has been hated or neglected in babyhood has had no experience of cooperation with others, and therefore has no knowledge of what true fellowship can mean.

A husband and wife who really cooperate with one another and with their associates are almost certain to appreciate the importance of training their children in attitudes of helpfulness and kindness. The task of the parents is to win the child's interest to the task of becoming a help rather than a hindrance in life, and to extend this attitude to as many people in the environment as possible.

The task of the teacher in his work with children is to continue the work of the father and mother, if they have made a good beginning in educating boys and girls to be contributing members of their small society. If the parents have failed in their work, the teacher must do all that he can to correct these errors. If a pupil has known defeat in his associations with others he must understand how to encourage him and show him better ways of relating himself to his playmates and to adults.

The teacher who really wishes to be of help to his pupils must be *objective* in her approach to them. He does not think

that children "are naughty just to annoy him." He does not use a child's liking for him to bolster up his own self-respect. He does not become angry when a boy fails to learn his lessons.

A teacher who is training his children to be cooperative never uses as an incentive the desire to be *ahead of others*. He continually emphasizes the fact that each child in the group has something to contribute to the welfare and happiness of the others. He avoids encouraging "star performers," both because of the harm it may do the "star" and because of the feeling of defeat it may give to the other pupils. He appreciates sincere effort on the part of every child. He knows the stage of development of each individual, and adjusts the difficulty of his work so that he can achieve success if he does his best.

The ability to fit the child's task to his present need is one of the most important techniques of teaching. Kunkel sums this up in the following "rule".—"Arrange all tasks so that they will not discourage the child. Do not make them too hard, so that they will not of necessity lead to defeat, and not too easy, so that they will not bore. Above all, state problems so that they will not seem a necessary evil, but an enjoyable part of the child's development.—If this is unsuccessful, then look for the error less in the schedules and prescriptions of the school authorities than in your own lack of productivity, and endeavor to regain your lost faith in life."

If a child is to grow in self-reliance and ability to contribute the school must provide him with many opportunities for making his own choices between two or more courses of action. When once he has chosen, the teacher must see to it that he carries the activity through to a successful conclusion; or, if he fails, she must help him to understand *why* he failed, so that he may do better in the future. Thus, the pupil will grow in ability to take responsibility for his own decisions.

Adolescence is often considered a particularly difficult time for boys and girls, as well as for their parents and teachers. Many of the problems which arise at this period are due to the fact that the student has not learned to cooperate with others, but thinks of himself in terms of inferiority or superiority. He wishes to be considered a grown person, to make his own choices, to be independent. If he has learned to think of himself as a helpful, contributing human being, his parents and teachers can safely leave him to make a very large percent of his own decisions, since he has already learned the assistance which adults can give when his own experimental data is inadequate.



Probably one of the worst mistakes made by parents of adolescent boys and girls is that of saying, "do this because mother (or father) wants you to do it" A boy of fifteen or sixteen should be thinking of his conduct in terms of a much wider social group than that of the home If he does not see the relation of his conduct to a fairly large group of his associates, an appeal to the desires of "mother" is probably doomed to failure

High school students sometimes grow impatient because they are not yet old enough "to do something about" social conditions which they wish to change They should be helped to realize that, while they cannot yet vote or join certain organizations, they can contribute a great deal by making known their own attitudes of cooperation and willingness to forgo special privilege Boys and girls of sixteen and seventeen have at times been very effective in awakening their parents to the need of considering problems of social welfare

The problem of the *content of school studies* is secondary to that of the development of constructive attitudes and habits But there is always danger, especially at the high school level, that content values will be placed above character values All teachers need to realize that *their own* attitudes toward life will influence their students long after the "subjects" they taught have been forgotten

Specific content should be chosen in terms of the child's level of development, in so far as this can be ascertained For young children, a large part of the material should be selected in terms of the problems of his immediate environment,—and will therefore vary from school to school, and from country to country With older children, the content will radiate out into wider and wider fields, but the students should continually ask themselves, "How does this relate to my own ability to contribute to life? At what point can I be of help in this problem?"

A good school course should provide the simple tools of communication,—ability to write and speak simply and clearly, the ability to read with insight, the techniques of simple mathematical thinking and computation These will be necessary tools in most occupations, and they will contribute to the individual's association with others

Art, music and literature should be taught in such a way that the pupil considers them not merely methods of *self-expression*, but also as means of understanding the desires, needs and aspirations of all mankind History should stress man's slow growth toward cooperative ways of meeting life's problems,

it should point out the failures as well as the successes, and strive to develop an understanding of why certain ways of life *had to fail*.

Science should be of special value in helping students become more *objective* in their approach to things, people and events.

Almost all schools need to give much more time and attention to work which prepares boys and girls for marriage and parenthood. The whole course of education should emphasize the *equality* of men and women, at the same time that it makes clear that a woman's *function* in society is not necessarily the same as a man's. Girls should be helped to appreciate their special contribution as the earliest educators of young children, and to realize that one generation of mothers could change our whole social order.

Older students, both boys and girls, should have an opportunity to study psychology,—or perhaps this field of understanding might better be called the study of human relations. Young people must be helped to realize that success in love and marriage is impossible unless both husband and wife believe and practise the fact that cooperation is the law of life,—that when one or both strives for personal superiority or special privilege the association will be unhappy and unproductive.

—*World Order*.

# EDUCATIONAL RECONSTRUCTION IN INDIA

BY

Principal A C C HERVEY, M A, I E S

*(With the kind permission of the Station Director,  
All India Radio, Lahore )*

We think too much in terms of administrative reform, and reform of the content of the curriculum. Administrative reform is essential but it is not educational reform. Neither is the changing of the length of courses, or the subjects, the primary consideration. Education is both a science and an art, and the primary consideration must be to discover its scientific principles, and its spirit, and to be ever guided and informed by these.

Administration is not an end in itself. There is a story of a man who spent his whole time "keeping himself fit," who was asked "Yes, but fit for what?" Similarly, administration has no value in itself, and an over-centralised administration has little time to think of education. There must be a devolution, or a greater sharing of responsibility, so that those at the head may remain, or include, educationists as well as administrators.

One of the favourite criticisms of our present system is that it was designed merely to produce good Government *babus*. But it is the desire to keep it so, that is, more than anything else, responsible for the blocking of all attempts at reform. Nobody is willing to give up the chance for his son, be it only a hundred or a thousand to one of "Government service." For this reason crores of rupees are wasted in turning vernacular schools into anglo vernacular, in maintaining an excessive proportion of high schools and arts colleges, and in maintaining in them, largely from public funds, thousands of unfit, and often over aged boys. The main remedy would appear to be the simple one of ceasing to make government service so peculiarly attractive. Many powerful vested interests have now grown up, all united in resisting reform, whatever lip service they may pay to it. Universities, colleges, high schools and those who live by them, if they are to live on their present basis, must maintain or increase the number of their pupils. If a sufficient percentage of these does not pass the examinations, they will not come. Therefore students must be promoted, sent up, and passed, even though teachers and examiners know, and admit, that they are not fit

The examinations must be conducted on a basis of text-book cramming, since this is the only way by which large numbers of the candidates can have any hope of passing. For financial considerations examinations must be frequent; they must be on prescribed text-books, and not only must be written and published but also their attendant "help-books." Of course these are not the reasons actually given for opposing reforms such as fewer examinations and less examinations on text-books. But none-the-less they are there! Education is almost altogether lost sight of. In fact we have no system of education, only of instruction and of preparation for examination.

The spirit of our education is wrong. Even where there is no corruption, our schools are based on force, fear, learning motivated by hope of reward and fear of punishment. Schooling controlled by such ideas must inevitably perpetuate an adult society controlled by such ideas, and *vice versa* in a vicious circle.

The qualities of vision, imagination, originality, unconventionality, creativeness, independence of thought or judgment are at a discount. Freedom and responsibility find no congenial soil in which to grow—initiative in teachers, or even in heads of institutions is not encouraged, and very little responsibility, or opportunity for learning to manage their own affairs, is allowed to the pupils, even in colleges. The motto we often see on our school walls "Trust begets trust" is generally ignored by all concerned. If we want our people to be able successfully to manage their own affairs in life, they must be given some opportunity, some training for this, in their education, in the schools. This essential reform costs nothing.

Education for freedom requires education in freedom. We must promote freedom because the innermost urge of the child's or man's being needs it for its due development or education. The essential bases of progress and right living are truth and love, and the essential bases of truth and love are trust and freedom. A society based on truth and love can only be obtained through an educationn based on truth and love. If you do not want to perpetuate a society based on competitive selfishness, force, fear and hypocrisy, then you must eliminate these things, all false and wrong motives, from the educational system. If this is not done, vocational courses and alternative diversions will avail but little. The poison will remain in the system and corrupt it.

It is surely obvious that if you want to eliminate communal divisions, whether of class or religion, in society, you must

eliminate them in education. The dogmatic indoctrination of defenceless children, whether religious, political or social, is a crime against their true nature and personality, and can have no place in true education. We are not to train the men and women of the future to live in the middle ages, nor yet in the world of 1938, but in the future. We are not to dictate to them how to create that future, but to educate them in freedom to create it for themselves. We must give scope for the potentialities of each child to develop unhampered, and not mould him into a fixed type according to our own ideas and desires.

The great majority of parents regard misbehaviour as a sign of want or wickedness, on the part of the child. But psychologists and educationists are convinced that in at least the great majority of cases this is not so, but that the misbehaviour, if misbehaviour it be, arises from the non-satisfaction of certain fundamental needs or urges of the child, usually as a result of the urges coming into conflict with those of adults who control the child. The parent does not realize the vital rôle he or she, especially she, has to play in the education of the child. Home education, the education of the small child, the education of the parent, has hardly begun to be considered yet it is an absolutely vital aspect of educational reconstruction.

Coming to the school, primary education is at present dominated by the idea of literacy. Literacy is not an end in itself. Its teaching as an aim in itself largely defeats its purpose. Literacy for what? A child has no interest in the three R's as such. The whole secret of education in the earlier stages is to study and observe the child's natural impulses to self-education and self-expression, and build on these and with these, and not against them. Schools for small children should be staffed mainly by women, and should be places full of light, joy and activity, where the children will feel happy and satisfied. This is the only true solution of the appalling problem of "wastage" at the primary stage.

The very meaning of the word 'education' has been largely lost sight of. The most helpful way of thinking of it is, I think, as a "setting free," "a releasing of the creative faculties and of the urge to expression." Man is the tool-using animal, he inherits from God the urge to create. Every child has it in him to be a creator of beautiful and useful things. The condemnation of the old system is that instead of liberating these faculties it actually inhibits them. Man has many faculties. Education means development of the whole man, not attention to one side or facet only. There is a wide spread idea that the object of all

manual work is vocational training. Manual activities, and opportunities for creative self-expression, must find a place in the curriculum because they are essential to education, because satisfaction of the desire to make or create is necessary to balanced development. Besides the value in mental and physical education there is the moral aspect also. There is the point, first made by Homer Lane, of the two types of happiness, the creative and the possessive. Those who are not educated to creative happiness do not become truly harmonised personalities and fall back upon the attempt to secure possessive happiness, which is perhaps the chief source of the world's troubles today. Children should be put upon the path of creative happiness, which is also the (path of self) path of self-discipline, as well as the path to appreciation of beauty, early. But with puberty there comes an immense and sudden accession of the desire to create. If this does not then find satisfaction in other ways at this stage, it will do so in sexual excesses, or be the cause of other aberrations. Hence the immense importance of manual or creative work at this stage. But it must be really creative, not merely imitative. If it is to be controlled by the syllabus, and by the present type of drawing-master, the money spent on it will be almost entirely wasted. There must be wide choice of activities, music, singing and acting as well as various forms of art and craft-work.

As Mr. S. H. Wood well puts it, "In reality education consists largely of experience, activity, the acquisition of knowledge and reflection upon it, which children must themselves achieve in cooperation with one another, though of course, under the stimulus and guidance of their teachers." "Gardens and games, chisels and rulers, clay and coloured chalks, and many other tools of experience and experiment" are required. The small child gets his experience mainly through his play. Play is his method of educating himself. The way to help him is to give him better means of play.

Needless to say, a new type of teacher will be required, and an improved system of training. To make a start, a considerable number of selected young men and women should receive training in leading modern teacher-training centres abroad. It is useless to send out modern trained teachers one here, one there, to old-type schools under old-type headmasters and inspectors. To begin with, a few selected institutions should be entirely staffed with teachers of the new type, with their own inspectors and examinations. For hand-work and for all teaching of small children, the necessity for an entirely different type of teachers is still greater, whose selection and training demand very careful

consideration We must have more experimental and demonstration schools as we have experimental and demonstration farms

A radical reconstruction is necessary, and it will be impossible to introduce the whole of it at once But a whole complete scheme should be carefully thought out now, not so rigid that it cannot be modified as experience may render advisable, and no changes should be made which do not harmonise with the scheme as a whole

Our educational system has to be both expanded in quantity and improved in quality It is idle to expect that this can be done on the cheap Particularly, there must be no stinting of equipment, and primary teachers must no longer be given the pay and status of a depressed class But on the other hand the wastage of money, in all sorts of ways, is enormous If India as a whole is really enthusiastic and determined on national unity and progress, the financing of educational reconstruction should not present insuperable difficulties

The aim should be to make primary and lower secondary education together compulsory, up to the age of 14 if possible After this there should be a higher secondary course and a first degree course, each of three years, normal ages 14—17 and 17—20, with parallel technical and vocational schools in each case There must be a stricter superannuation limit than at present For non selected students there shall be less, for selected students more help available In Europe the primary course is almost universally of four years, from age 6—10 Exhaustive American tests have proved that the normal age at which the average child learns to read is  $6\frac{1}{2}$  to  $6\frac{3}{4}$  There is much to be said for Mahatma Gandhi's starting age of 7 and basic course of 7 years The basic course in the U S S R, and in the Jewish rural colonies in Palestine, is eight years ages 8—16 If we start the basic compulsory course at 7 or 8, we could then develop the valuable prestandard schools which could be entirely co-educational and entirely staffed by women, and could be increased in number with the increase in demand, teachers and financial resources

The most successful and influential modern educational institutions all over the world have certain features in common which are not found in the traditional type of school In these learning is active rather than passive, by doing rather than by listening, through activities linked with the child's immediate needs and environment, in circles growing wider as the child itself grows in mind and body, by the devotion of a large amount of the time to hand work and craft work, activities providing ample

variety of opportunity for self-expression for the children, with the adults as helpful guides and advisers rather than dominant dictators. There are places both practical and cultural, full of joy and happiness, based on co-operation rather than on competition, on discipline by consent rather than coercion, on the harmonious all-round development of the individual personality in a real community life. The more these principles and practices are successfully adopted the more it will be found that other problems, economic, social and political will tend to solve themselves, since all these are basically the legacy of defective education. We need above all, vision and imagination, to realise the immense possibilities of the human mind and spirit.

These principles and practices cannot be successfully adopted quickly, or before a country or society is ready for them. Therefore we need above all, at present, enlightened propaganda, the education of public opinion to understand, demand and appreciate what education really means, and to assist in its introduction.

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### GERMAN REICH YOUTH LEADER CALLS 1938 "THE YEAR OF UNDERSTANDING"

The German Reich Youth Leader, Baldur von Schirach, sent a New Year Message to the youth of Germany in which he said:

"Every year the Hitler Youth receives a new watchword in January. As I announced "*Jahr. der Heimbeschaffung*" for 1937, I knew that you would all co-operate with me. But that, by the close of the year, over 1000 Hitler Youth homes should be being built, has exceeded all my expectations. During 1937 many Youth Hostels have also been erected. All this has been your work. It has been done through your unity, about which you may well be proud. Obedience, self-denial, fidelity and comradeship were, are and will remain necessary for every success . . . .

"During the coming year the aim of the Hitler Youth shall be to form new contacts between Germany and foreign youth movements. The youth of each country shall get to know each other, not in order to copy, but in order to achieve a justified, mutual understanding of the foreign community. Only through such an understanding can the foundation for cooperation between the great Youth Organisations of the present be laid."

—*News in Brief.*

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## "THE Ph D. SUPERSTITION"

BY

JOHN C. GRANBERY, Ph D

Our colleges and universities have long been suffering from the evil effects of the Ph D superstition, and now the pernicious error is beginning to permeate the public school system. In principle the same false judgment applies, though to a less extent, to the M A and other higher academic degrees.

In the first place, no special ability is required to take the Ph D, even in the best universities, provided certain other factors are present. One of these is money enough to see it through. Another is the moral quality of sustained application in a specific field, with persistence and willingness to stay with it to the end. Taking the examination requires some courage.

In the second place, the kind of training called for has little relation to the duties of the teacher, whether in college or high-school, or of the school superintendent and principal.

The completion of a thesis is neither preparation nor incentive for future productivity. The candidate is fulfilling a requirement to get a job. The work is tedious, and the publication expensive. The subjects are usually trivial, and the style uninteresting. The dissertation will accumulate dust. The successful candidate has met the conditions, but his arduous labor has fitted him neither to teach nor to do creative literary work.

The regimen required in obtaining a Ph D may be a positive disqualification for the kind of school people we need. Emphasis has been on what is called research work. Original sources are to be exhausted. There may be no relevance of the subject to contemporary life and problems. As Harry Elmer Barnes puts it, one is supposed to divest himself of all human emotions and become a cerebral recording machine. The *homo academicus*, working objectively without convictions in philosophy, religion, politics, and esthetics, and without special preparation for understanding the nature and behavior of man, may, in the case of what is called historical research, have the intellectual qualities and ideals of the clerk and copyist, though no creative intelligence and constructive imagination. Research is indispens

able, but the real historian is not the plodder who gathers facts but one who takes the raw material, evaluates, and organizes it.

Undoubtedly the Ph.D. has its place and value, but the fictitious halo about it in connection with the teaching profession has produced two evils. On the one hand, our schools are cluttered up with inferior minds, as well as with timid, harmless, colorless souls. An inconspicuous youth with a Ph.D. secures an appointment. To hold his job and advance he must cultivate docility. Independence and dissent will be penalized.

The second unfortunate result refers to that over-specialization which may be of tremendous value for research in a given field but may also prove disastrous for college and highschool teaching. For example, one trained in the physical and biological sciences may be innocent of social science.

"Let's raise standards!" is the well-meaning cry. So a host of tired teachers flock to the summer school, instead of to the mountains and seashore. For they must hold their jobs and secure better ones. Their heart is not in the work they are attempting; what they want is the credit. If they are doing satisfactorily in their present positions, they should be retained without subjection to needless cruelty. If they have not kept up with educational progress and are unfitted to continue, they should be pensioned.

Our several types of school should state their objectives clearly, and then build curriculum, faculty, and activities about those objectives. I rejoice in the fact that highschools are tending toward the dignity and independence of standing on their own feet, determined to do their work according to their own standards, without taking their cue from institutions above them. The same obligation rests upon the state college and university, the teachers college, the school under private or church control. Possession of an M.A. or Ph.D. may be in one's favor, but there are other qualifications more important.

—*The Journal of the National Education Association, U.S.A.*

## THE ABNORMAL CHILD

BY

Prof. DIWAN CHAND SHARMA, M A.

It was a Swedish poet and author who prophesied that the 20th Century would be the century of the child, and his prophesy has come true. We have become increasingly aware of the personality of the child, and have come to attach much importance to its care and training. "The Child is Father of the Man," said Wordsworth in a moment of prophetic insight and the truth of this statement has been established by the investigation of many psychologists such as Freud. These investigators into child psychology have proved that the human personality in its essentials is developed in the first six years and that what follows is merely a confirmation, a deepening and a development of the instincts and impulses, of motives and urges found during those early formative years. These psychologists therefore say, and they are right in what they say, that if we take care of the child, we take care of the future man. But we cannot adopt the traditional approach towards the upbringing of the child as it has been done in the past. We must make use of all the data that physiology and psychology have placed at our disposal in the handling of children.

First of all, let us take the child, as it is, up to the age of five. Then its chief business is to keep alive and grow. The mother has therefore to see how the child gains in health, how it adds to its weight and height, what kind of food and clothes suit it best, and what kind of habits it forms in its sleeping as well as waking hours. But it is not only the physical life of the child that should be looked into, the mental life should also be watched with great care for the moral, social and intellectual ideas of the child would be influenced by its environments, and by the materials with which he plays. The child should therefore be kept away from everything that is evil or mean or low and should be surrounded by those things which develop its latent powers. Only under proper conditions would the child grow into the normal child.

What the normal child is like has been expressed in a poem called 'The Island'. The hero of this poem, Christopher Robin, wants to sail through the seas and to satisfy his love of adventure.

After having reached the beach, he wants to rest and say to himself:—"There is nobody else in the world and the world was made for me." He says further:

"I never did . . . I never did like 'Now take care, dear!'

. . . . I never did think much of 'Not up there, dear!'

It's no good saying it. They don't understand."

This shows the child's love of self-assertion and its hatred of all kinds of repression. Says a writer, "A child is characterised by independence and egoism which should be directed towards the development of the higher qualities of a good citizen." Again the child is sociable and therefore seeks companionship. A child's love of free movement is expressed in another poem called Hoppity

"Christopher Robin goes

Hoppity hop

.....

.....

Whenever I tell him

Politely to stop it, he

Says he can't possibly stop."

This means that the child loves to run, to hop, to jump and to skip and that it resents any kind of interference with its free movements. The child also loves to exercise its imagination on the everyday things of life. A poet has put the following words into the mouth of a child:

"One of the chairs in South America

One of the chairs is a ship at sea,

One is a cage for a great big lion

And one is a chair for Me."

This shows how simple games and plays add to a child's store of information and call into play his imaginative faculties. Again the child is interested in nature and in stories. Says a psychologist, "As a child listens to these stories, he comes unconsciously under the spell of beauty and style in language and

better feelings and emotions are stirred as the story leads to a discrimination between good and bad, and helps in the formation of moral standards and ethical judgments." Similarly a child acquires social standards through its games and sports, its environments and its associates.

But if this is true of the normal child, you will ask: What of the abnormal child? The abnormal child is one in whom the normal characteristics of a child do not find their full and unfettered expression. "A child of this description may not come up to the intellectual, physical and moral scales of measuring; it may deviate from the normal on the minus and on the plus side in these three fields." Thus we may have criminals, degenerates, moral imbeciles, selfish children and troublesome cases. We may also have the blind, the deaf, the paralysed, the diseased, the sickly and the anaemic. We might also come across idiots and the feeble minded.

Let us first of all take the morally defective child. In such a child the sense of obligation is deficient and it feels no compunction at doing immoral acts. This condition in a child may be due to bad heredity, defective braining and unsuitable environments. It can also be due to the perversion of certain natural and normal instincts, and nervous disturbances. If these tendencies are not checked in time, the child becomes vicious, morbid and even criminal. Such a child should therefore be taken in hand, by the social worker, the teacher, the parent, the physician and the psychologists as early as possible. First of all, the physical defects of the child should be remedied and it should be made to adopt a more hygienic mode of living. Then intelligence tests should be applied and a special mode of teaching should be determined for it. The social conditions and relationships of the child should also be inquired into. "The weak parent who 'spoils' the children, the morbidly anxious parent who nags and never leaves them alone, the stern parent who seeks to suppress, the ignorant parent who fails to provide stimuli and results of the right kind, the selfish parent who takes no interest in the children's development—these and others need to be reasoned with." In other words, the habits of the child should be reorganised, and its instincts redirected.

If there are abnormalities to be noticed in children on the moral plane, these are also to be seen on the physical plane. These result in sense defects, abnormalities in height, weight, rate of growth and maturing, in nervous disorders of various kinds, such as epilepsy, hysteria, neurasthemia and dementia. It is not necessary to go into the symptoms of even nervous

disorders but it may not be out of place to dwell on the causes of some of these. Epilepsy, for instance, is due to poor heredity, where the parents have been victims of alcoholism, venereal diseases and insanity. It is, however, possible to cure it by making the child lead a quiet, unexciting and orderly life and by removing all those factors which tend towards instability. In the same way, hysteria is due to the laxity of emotional control and sometimes leads to deafness, dyspepsia and paralysis. A child suffering from it should be unconsciously led to practise the principles of mental hygiene and should be encouraged to be in the open air. In every case scolding should be avoided. For the old adage "spare the rod and spoil the child" has come to be out-moded in the light of modern psychology. What a child needs most is 'Freedom'—freedom of movement, freedom of self-expression and opportunities should be provided for these things. A child suffering from neurasthenia suffers generally from headache and sleeplessness. It develops eccentric habits, becomes listless and timid, is prey to terrors and is generally aloofish. This disease is generally the result of heredity and narrow repressions, and its cure should be both physical and mental. First of all, irritant causes such as bad teeth should be removed. Then the child should be made to take quiet rest and should be surrounded by an atmosphere of sympathetic understanding. It should be encouraged to mix with other children in games and should be kept busy as far as possible.

On the mental plane also we have several kinds of the abnormal child, such as the dull child, the backward child and the precocious child. The backward child is one whose mental growth has been retarded by a disease or something else. Then there are feeble-minded children, imbeciles and idiots. These defects may be inherited at birth or acquired at an early age. They are characterised by bodily defects as well as defects in speech. Such children have a poor memory and are practically incapable of thinking. For such children special treatment is required which can be had in special clinics which are under the charge of men specially qualified for their jobs. In America and Europe we do have some schools for idiots and feeble-minded children where they receive training in agricultural arts, in industrial works and speech training. Similarly we have schools for the blind, the deaf, the crippled, the epileptic, the nervous and the mentally defectives.

But whatever be the nature of abnormality in children, physical, mental and moral on the plus side or the minus side, it cannot be denied that the child has to be dealt with sympathetically.

cally It should be taken in hand as early as possible and the parent, the teacher, the psychologist, the physician and society should all co-operate in remedying its defects as soon as possible and in turning it into a useful citizen

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## THE HISTORY OF EDUCATION IN THE UNITED STATES

Education • Castigation

Spare the rod and spoil the child

Education • Segregation

Girls in classrooms make boys wild

Education • Socialization

Pupils teach and teachers learn

Education • Motivation

Interest is the theme supreme

Education for vocation

Mend a tire and dress a doll

Education • Integration

Social science—that is all

Save the nation by innovation,

Information, concatenation,

Revelation, elucidation,

Affirmation, visualization

Here an action and there an action,

Latin all by derivation

—B L Ullman in *School and Society*

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## I. NEED OF GIVING MILITARY TRAINING TO YOUNG BOYS OF INDIA

Sir,

The deciding arguments on this vital controversial question are those based upon the lessons of history, commonsense and morality. We shall find nothing wrong, if our sons take to a military, naval or aviation career in the defence of their own homes, their country, their civilisation and their heritage. Indeed we shall have nothing to do with our sons and shall feel very poorly for our young men, if we found that they failed in their duty of defence in times of national emergency and foreign invasion. First things come first and the protection of a glorious heritage and preservation intact of the good, great and revered memory of our forefathers is an obligation from which we at any rate are not prepared to shirk. What we did and do, we also like our sons and young men to do. Our young men must be trained for national defence.

It has been argued that an adherence to the creed of non-violence is inconsistent with any projected plans for the training of young men in the art of warfare. The principle of non-violence in the abstract has been the subject of voluminous literature and has been stated, expounded and reiterated in such varied forms that one hardly knows what it permits and what it prohibits. So far as we are concerned, we never have any doubt in our mind on the subject at all. We are not prepared to cover a multitude of sins emanating from moral and physical cowardice by glibly talking about non-violence. In an orderly well established and stable society, the principle of non-violence as a daily code of conduct is both necessary and defensible. In an abstract world where humanity has forgotten ambition, conquest and imperialism, the principle of non-violence may be set to regulate in substance the relationship of man to man and one nation towards another. But we are living in times when idealist philosophy, if it is not related to hard facts of life, is likely to land us in the wilderness. We are living at a time when Europe is arming itself at an alarming pace and America and Japan are not very much behind in this matter. The result of this mad race in armaments is seen in the instances of three centuries. Despite combined European protest, it was possible for Italy to commit an outrageous rape on the peaceful and ancient land of Abyssinia because the Abyssinians were not sufficiently trained to defend their country. Despite non-intervention pacts, the ancient and once mighty land of Spain has become the cock-pit of Europe, because Spain itself presents a divided house. The ancient civilization of China is suffering deadly blows at the hands of her neighbour, Japan, because her sons are not able to defend her soil. These instances are an eye-opener to India. India is one of the most ancient countries in the world and her civilisation and culture require to be preserved for the good-name and peace of the world. It is only her sons who can do this. The tradition of India is anti-militarist and her peoples are not given to any kind of aggression. In fact India has by too rigid an insistence on the principle of non-violence made herself open to the accusation that her sons have become immaculate. We are living in days when there is a good deal of talk of India taking her



place as an equal partner in the British Commonwealth of Nations. All this talk has no meaning for us unless Indians show capacity for and do their duty in regard to national defence. The Joint Parliamentary Committee on Indian Constitutional Reforms observes that the defence of India must to an increasing extent be the concern of Indians themselves. We feel that it is not inconsistent with the principle of non violence to be prepared for national defence. Indeed we are of the firm opinion that we shall be criminally failing in our duty towards our country and people if we did not train our young men for national defence. This is an obligation which a nation shirks at the peril of destruction and annihilation.

It is no doubt good and necessary to devote one's time and energy to the pursuit of the gentle arts of civilisation but civilisation and its attendant pursuits cannot last and run their daily course unless they are assured of a ring of safety from disturbing interference. That ring of safety in the case of a nation is provided by its army navy and aerial forces. While emphasising the cultural attainment of India it is many times forgotten that in the preservation of its ancient civilisation the army navy and air force have silently done their duty of guaranteeing India immunity from foreign invasion. These defence forces cannot continue to carry on their duties unless men are trained to take place of those who are getting grey on account of weight of years and the arduous nature of their duty. It is fashionable to speak and to write about the unemployment problem in India. But we feel that this unemployment problem arises from two main causes viz — (1) that Indians are not admitted to the defence forces in as large numbers as they should be and (2) that a good many Indians are not prepared to undergo the hardship and discipline of a career in the army navy or air force. This aversion of a number of Indians to face the risks of life and to take things as they come is due to the lack of the necessary training in the very early years of life. Character of a man is mainly built in the nursery or at school and if Indians are not given opportunities from their boyhood for learning the duty of national defence they will not turn out good soldiers and sailors.

It is therefore necessary and desirable to put before the next annual conference of the All India Federation of Educational Associations a resolution to the effect that Military Training should be given in Secondary schools to all boys in India. Camp life is a necessary part of this training and Indian boys should be used to this from their very boyhood. It is only thus that Indians can be prepared for taking over the defence of their country. The best material out of this will go to form officers of the Indian Army.

K. S. DIXSHIT

*Retired Deputy Educational Inspector Satara*

## II A CENTRAL UNIVERSITY FOR INDIA

In this age of economy it is not perhaps out of place to suggest a Central University for India. Just as a federal government supervises the working of the various autonomous states so the Central University at the metropolis can control the provincial universities in respect of general policy syllabus and degree examination.

The very idea of such a university gives a death blow to the prestige and independence of the Indian Universities. As it substantially affects the power and privilege of those who belong to the charmed circle of the present-day universities of India, it is likely to be vehemently opposed by them. It is, however, economical and sane in its outlook and may, therefore, be acceptable to many.

Among the Indian Universities of today there is no equalisation of standards either of syllabuses or of examinations. Nay, while some of them are accused of low standards, others are eulogised to the seventh heaven. This discrepancy upsets the cherished plans of many a student who goes out of a university. The advent of the proposed university dispels the darkness of irregularities and renders the Inter-University Board nugatory and with it the question of reciprocal recognition of degrees by the Indian Universities.

Under the proposed scheme not only the large expenditure incurred by the Indian Universities, in setting question papers and in summoning the various meetings relating to examinations, for instance, is reduced to a minimum, but there is a clear saving of a huge sum per annum.

It is an open secret that in residential universities the teachers are not unoften found neglecting their primary duty. Being themselves the heads of the departments, or being in touch with such heads, they have little anxiety for the examination results. Their favouritism plays a great part, which makes or mars the destiny of students at a sweep. Examinerships are a matter of mutual give and take. These defects have every chance of being remedied by the proposed university.

This University goes a great way to dispense with the various competitive examinations and the attending waste of money, labour and energy. Here efficiency is ensured owing to the collaboration of eminent luminaries of the different parts of India, and the evil of inefficiency found in certain Indian Universities steered by the short-sighted satellites prejudiced by pacts and grabs meets its well-deserved end.

The provincial universities and important colleges should be the centres for the degree examinations conducted by the Central University and they should be left free to prescribe courses for and hold the matriculation and the Intermediate examinations, and to do all about the graduate and post-graduate studies except prescribing syllabuses for, and holding, the degree examinations.

It is desirable to have all the provincial universities under a Central one, and never to have a multiplicity of universities in a province. It is not sought here to restrict the sphere of education by abolishing colleges. On the other hand it is held that their existence in ever-increasing number is necessary to promote peace and prosperity through well-planned higher education. But surely the students should be taught by able teachers and the syllabuses of studies should be prescribed and the degree examinations be conducted by the cream of learning.

It is also very desirable that the provincial universities should select one or more subjects along with others for specialisation, which will earn for them a country-wide reputation and will make up for the lost prestige. The fitness for specialisation depends on funds, tastes, locality and traditions, and requires a compulsory interchange of staffs and libraries.

The holding of these degree examinations by one body may at first be looked upon with doubt and dismay; for it is not an easy affair, one might opine, to conduct them for such a vast country as India at one and

the same time. But a little reflection will convince even the protagonists of the opposite camp that the problem is not insoluble. How can the University of London manage to hold its examinations for external students simultaneously at distant colonial centres?

There are no doubt difficulties in the materialisation of such an idea. Although it is not impossible, yet it is a taxing business to bring about changes in the existing provincial and central Acts of Legislatures relating to the Indian Universities. It is expedient, however, to begin with, to subject all the universities of a province under one University of the province with a final view to bringing all the provincial universities under a central control.

These are a few rudimentary suggestions for further consideration by learned educationists in the interest of economical but sound education. It is agreed on all hands that higher education as it is today in India, is very costly and does not pay. And if it does not serve its own purpose, it is worse than useless.

RAMDAS BHARADWAJ

A V P High School Kasganj (U P)

## WHAT IS THE SECRET OF THE GOOD TEACHER?

His secret lies along three lines. First, he must be sensitive to the way the student feels and thinks. He must understand the difficulties and the embarrassments of each student. Never must he do anything to make the student feel ashamed if he doesn't know the answer or to indicate that he has asked a foolish question.

The good teacher will look to the practical management of the class-room. He will work out every detail of his management in advance. He will never make assignments that will swamp the students or for which the books are not available. He will seat the student carefully, giving the deaf and the short-sighted, for example, special consideration.

Finally the teacher will be sensitive to significant current problems, he will help to clarify today's situation in whatever subject is under consideration. And he will point the way to future developments. In my class in education, for instance, we are working on schoolroom method half a generation in advance of those of today. I mean, it will take popular practice a half generation to catch up with the best available theory.

WILLIAM H. KILPATRICK

—Public Education Bulletin of Pennsylvania

## REVIEWS

*Bulletin of League of Nations Teaching No. 4.*—December 1937. Published by the Secretariat of the League of Nations, Geneva.

This book gives publicity to those activities of the League which are likely to interest educationists. Special prominence has been given to the year's developments in the field of intellectual co-operation.

One of the aims of the Advisory Committee on League of Nations Teaching is 'to give publicity to the most appropriate educational methods of inculcating into the young some idea of the principles of the covenant and the activity of the League,' but another important aim is to stimulate investigations and exchanges of views on all possible means of affording a better grasp of the interdependence of nations in the world of to-day, and hence of the need of international co-operation.

The present volume sets forth the desirability and the methods of securing intellectual co-operation among the various nations. Gonzague De Reynold, Chairman of the Swiss National Committee on Intellectual Co-operation, has contributed a very thought-provoking paper on 'The rôle of intellectual co-operation in Contemporary Life.' Co-operation is, according to him, 'Co-ordinated action for a common good.' He maintains that 'Sympathetic curiosity' is the essential condition of intellectual co-operation.

Says M. Reynold "A whole great period of history is closed; we are in an intermediate period between a world which is dying and a world which is being born. During such periods, everything is in a state of flux, the curve of general civilization declines and peace is threatened. It is, therefore, more than ever necessary that the best minds should come together and should endeavour to maintain at least in themselves the idea of civilization, order and peace. Their task is to link the old world to the new, to save the essential values of the old world, to help the values of the new world to find expression and practical application, and to see that they mutually enlighten and stimulate one another. This implies co-operation in producing synthesis and harmony."

He puts the aim of intellectual co-operation in the following words: "The aim and task of intellectual co-operation in the contemporary world is to create a synthesis between nationalism

and internationalism Nationalism is the consciousness which nations have acquired of their own genius, once their individuality has been established Internationalism is the relationship and the exchanges which peoples naturally need with one another, if they do not want to die of isolation and suffocation

The writer believes that the psychological and moral elements are the effective conditions of real peace It cannot be established by a treaty signed on a certain date It is the result of long patience "It is a matter of conciliations, adjustments, *rapprochements*, exchanges It is a long evolution which we must work to make creative Peace is a faith, but which knows how to submit to realities" He rightly maintains that in order to play its part on the stage of the contemporary world, intellectual co operation must have political independence

Some very useful methods have been recommended for securing international outlook The Cinematograph and Broadcasting have been recommended for this purpose, and teachers have been asked to teach principles and facts of international co operation in schools through History, Geography, Modern Languages

Rightly has it been said that it is impossible to teach history without at the same time teaching international relations The teacher must explain to his students that the study of history is a study of the development of human groups and their unceasing efforts to live in security with their neighbours near and far. As the proper study of History should make the pupil a citizen of the ages, geography is peculiarly fitted to create a citizen of the world "Its presence in the curriculum is a powerful auxiliary to the promotion of those attitudes which are the basis of just and harmonious relations between peoples of different countries as well as between the different regions of one country" The study of modern languages is eminently suitable for initiating the pupil into the particular endowments of other peoples, for 'the spoken language reveals the spiritual style and the inner structure of their life'

The Bulletin also contains a few chapters entitled 'The League of Nations at work' These sum up recent discussions regarding raw materials, the reform of the convent, and international health work It also gives an illuminating survey of the International Labour organisation and the raising of the minimum age of admission to employment

A number of interesting speeches and talks broadcast from Radio Nations during this year have also been published These are of particular interest to educationists,

The Bulletin is very informing and enlightening and will be of great use to teachers, parents and statesmen.

—J. D. S.

### **A University for Travancore.**

This is a memorandum, giving useful information on the educational activities of Travancore, and justifying the need for a separate university for it. For the last twenty-five years, the people of Travancore have been pressing for a separate University for the State. An authoritative and comprehensive exposition of the need for a separate University and of its ideals and aims was given sometime back by the present Dewan, Sir C. P. Ramaswami Aiyar, at the Conference of the members of the Legislature and other prominent persons. He laid great stress on the economic and industrial needs and problems of the State and envisaged the University as an institution which would set before itself as its primary object, the task of training young men 'to play their part worthily in the various schemes of industrial, agricultural, and commercial development which have been and are proposed to be undertaken.'

The State has ten colleges which are affiliated to the Madras University, of which as many as six are maintained by the State and only four by private managements. It would, therefore, not involve the State in a heavy expenditure in having a separate university of its own.

The Colleges at Trivandrum will be transferred to Travancore University and the mofussil colleges will also be admitted to the privileges of the University. The University will enjoy a considerable degree of autonomy in academic matters. Regulations in connexion with the University have been passed by the Maharaja of Travancore, and it is proposed to inaugurate the work of the University in the academic year, commencing in July, 1938.

Every lover of education would wish the new University a successful and prosperous career.

—J. D. S.

### **Report of the Inter-University Board, India.**

This contains the proceedings of the 13th Annual meeting of the Inter-University Board, held at Allahabad on the 13th and 14th December 1937. There is an address of welcome by Pt. Iqbal Narain Gurtu, the Vice-Chancellor of the Allahabad University, which is followed by a number of resolutions passed

by the Board. At the end, there are a few appendices giving useful information on the organisation of the International Historical Congress, representation concerning the recently revised regulations for recruitment to the ICS Examination, inclusion of aeronautical instruction in the curricula of Indian Universities, the teaching of Law in the Universities in the light of the recommendations made by the Sapru Committee, and a few other important matters connected with University Education

—J D S

*Training in Democracy The New Schools of Czechoslovakia*,  
by Francis H Stuermer New York: Inor Publishing Co  
Published under the auspices of the Progressive Education Association 1938 272 pages, illustrated,  
\$2 50.

Czechoslovakia, Central Europe's island of democracy surrounded by five dictatorships, is training its public school pupils progressively for a useful life as free, public spirited, democratic citizens. Dr Francis H Stuermer, who recently spent a year in that country studying the public school system, higher education, and adult education, covers all of those levels in this book. But about half of the book is devoted to the progressive experimental schools on the primary, junior high, and secondary school levels. (The junior high school is administered as an upper elementary school.)

Except for the much smaller countries of Switzerland and Denmark, Czechoslovakia has the only progressive, democratic school system in Europe. Of particular interest to American educators is the fact that such a program has been developed successfully in a centralized school system under a national department of education. Educators who favor a centralized system for the United States will find many arguments for their side in this book.

Dr W Carson Ryan, Jr, president of the Progressive Education Association, under the auspices of which this book is published, states in the Introduction:

"Doctor Stuermer's account of the efforts of the Czechoslovak Republic in our time to establish and maintain a program of education to meet the needs of a democracy is a useful example of a kind of international exchange of ideas and experiences that has proved exceedingly valuable in the past and has possibilities that are hardly realized today. More Americans and other English-

speaking people should know what the Czechoslovak Republic is doing. It is of interest not only to those who speak of 'progressive education' but to many others who do not use the term but are sincerely trying to help the people of democracies to educate themselves richly and well."

The Czechoslovak schools are patterned upon democratic, progressive American educational ideals. Integration, activities, pupil participation in unit development, life situations, committee work, democratic discussion of social and political problems in civics classes, pupil self-government, and modern measurement programs, are some of the progressive ideas that are widely popular in Czechoslovakia. But the educators of this country have originated many progressive plans and programs of their own. Integration has been developed as the "global method."

This book has an excellent index, a glossary, and a selected bibliography. It has twenty-eight photographic illustrations.



## EDITORIAL NOTES

### *Justice M. R. Jayakar on Education*

It was a thought provoking Address which Mr Jayakar delivered at the last Convocation of the University of Lucknow. While noticing the present discontent in educational circles he said, "It is difficult to devise an ideal system of education which will remain operative for all time or endure through all the vicissitudes which overtake the social edifice from time to time" To Justice Jayakar "Under the present circumstances of India, a training in citizenship is another word for a training in democracy, meaning thereby the equipping of the youth with the attributes which make the working of democracy successful. The process lies in educating his judgment and in planting in him the temper and habits of a good citizen." He has given the warning that "in the patriotic desire to popularise and reform their schemes of education there should be no interference by the new Government with the intellectual democracy of our colleges and Universities." And again "It is necessary that this spirit of freedom, this triumph of the human reason, must be maintained at all costs within the precincts of our colleges, the nurseries of the future citizen." Mr Jayakar has made in the end an impassioned plea for the love of all beauty whether of Nature or of Art. In these days of increasing armament and the development of destructive capacities of nations this plea has a special significance and should not be lost sight of.

### *Mr Sachchidanand Sinha on Education*

There are few in the country who can vie with Mr Sinha, the Vice Chancellor of the Patna University, in eloquence and erudition. He delivered a masterly address at the last Convocation of the Nagpur University which deserves more than a passing notice. His views on the unemployment problem in India deserve greater publicity and are full of cogent reasoning. He has pointed out courageously that there has been an error of judgment in dealing with the question of unemployment among the educated classes as something solely and wholly distinct from the state of chronic unemployment is prevailing among the vast bulk of the illiterate masses in the country. Prominent educationists are unanimous with Mr Sinha when he says, "Let our educational system be

recast, revised and reorganised as you will, but unless the economic system is substantially improved by means of the industrial development of the natural resources of the country, unemployment shall not have disappeared even though higher education were reformed out of its very existence." Mr. Sinha has dwelt at considerable length on the debt which India owes to Universities and has quoted from prominent Indians of different types of political views. He is against sacrificing knowledge and culture at the altar of technological studies and wants a happy blend of the two. But he would not find many supporters in his advocacy of the continuance of the present position of English and of Western culture in the schemes of our higher studies. To him English is not a foreign language but a second language which Indians habitually use in their political and civil activities. Mr. Sinha has rightly condemned the evil of communalism and has appealed to the nation to destroy it at any cost. He delivered a learned discourse on the position of Feeling and Intellect in the life of the individual and the community and compared and contrasted the Ideal with the Practical. He warned the people against adopting stunts and slogans and expressed his appreciation of the signs of regeneration visible in the country. The address is couched in elegant vocabulary and is at once striking and impressive.

### *The Mahatma's Scheme of Basic Education*

It is several months back that Mahatma Gandhi enunciated the principles of Basic Education and since then these principles have been incorporated in a detailed scheme submitted by Dr. Zakir Hussain and Principal K. G. Saiyidain. The scheme has been before us for some time and has aroused considerable enthusiasm as well as animosity. There are some who consider it to be a panacea for all our educational ills while there are others who would not touch it even with the proverbial pair of tongs. The various provincial Governments especially of the Congress pattern have appointed committees to adopt it and modify it to suit different provincial conditions. None of these Committees has reported as yet. The last All-India Educational Conference did also appoint a committee to go through the scheme and make its recommendation. The report of this Committee is still awaited. In the meantime teachers all over the country have serious misgivings about their future prospects, duties and privileges. We may safely assert that there are some admirable features in the scheme which every provincial government should strive to adopt

but the adoption of the scheme *in toto* may be fraught with grave consequences

### *Hindi as the lingua franca of India*

The Government of Madras Presidency has sanctioned the compulsory study of Hindustani as an essential part of all school curriculum. It is a bold step full of enormous potentialities. Owing to their ignorance of Hindustani South Indians are sadly handicapped when they are outside their own province. There is a plethora of languages in the South and the addition of one more language has enhanced considerably the linguistic burden of the children. But a knowledge of Hindustani is fast growing into a political necessity for India and it would be unwise to ignore its importance. The experiment is being watched with keen interest all over the country.

### *The Vidya Mandir Scheme*

While the other provinces are cogitating and deliberating, the Education Minister of Central Provinces has taken the plunge and started his scheme of education through Vidya Mandirs, i.e., schools subsidised by a grant of land from the landlords of the locality. The Vidya Mandirs have adopted Mahatma Gandhi's scheme and the first batch of teachers trained for it are already on their way to the schools. Great sacrifice is demanded of the teachers who have been trained in the new principles and they have been enjoined to continue their sacrifice for at least 25 years. While yielding to none in our appreciation of the principle of sacrifice for a good cause we are doubtful about the lasting nature of the spirit of sacrifice. We are afraid hypocrisy may soon replace the spirit of service so much in evidence now a days.

### *Professor Amaronotho Jha*

Our congratulations to Professor Amaranatha Jha on his unanimous election to the post of the Vice Chancellor of the University of Allahabad, in the vacancy caused by Pt. Ishal Narain Gurtu going on leave for four months. Professor Jha has also been recently elected to the Fellowship of the Royal Society of Literature. The worthy son of a worthy father, Professor Jha, has made a name for himself in the country by dint of his learning and his mastery of details. As a voracious reader of books and reports he has few equals and his personal library is stocked with

up-to-date books on literature, Art and Education. To his outstanding intellectual abilities he adds a cheerfulness and an affability of temper seldom found in scholars of repute. He has a wonderful grasp of the various aspects of modern educational theory and practice and is always sought for the presidency of sectional meetings at the All-India Educational Conferences. It gives us a peculiar satisfaction to note that professor Jha is on our Editorial Board and that he is an individual member of the All-India Federation of Educational Associations. We wish him many years of active and useful life in the service of the University to which both he and his father have devoted themselves.

*Professor K. S. Vakil*

We are glad to announce that Principal K. S. Vakil of the Teachers' College, Kolhapur, who has been to England for the study of Vocational Education and Vocational Guidance, will soon be amongst us. Principal Vakil is always in the forefront in our All-India Educational Conferences and his fondness for studies, even after having retired from Government service is evidence of his youthful mentality. He is an educational asset of the country and has done pioneer work in developing a teachers' college in an Indian State.

*The Late Dr. Sir Mohammad Iqbal*

India is the poorer for the loss of the poetical genius of Iqbal. He offered a new philosophy of life to the Persian literature and gave a song to his countrymen which is cherished in schools as well as in homes. We do not weep for him but for ourselves as we have been deprived of a great leader, a great thinker and a great poet. We can ill afford this damage to our cultural life but have to bow to the inevitable! May his soul rest in peace!

*The Late Mr. F. J. Gould*

Mr. F. G. Gould of Armorer, Woodfield Avenue, Ealing, London, W. 5., passed away on Wednesday, April 6th. 1938, at the ripe old age of 82. The cremation took place at Golders Green, on Monday, April 11th at 12-30 p.m. No mourning and no flowers, by his request. It was very recently that we published an article from the pen of this great humanist. In life he gave his best to the cause of moral education adapted to all schools of thought and faith, to social fraternity, order and progress and to

**World Unity** In death he is immortal as the world is the richer for his having been in it. He showed his courage of conviction in adopting cremation in a country where it is not the popular form of the disposal of the dead. His request not to have mourning after his death is evidence of his firm belief in the immortality of soul and in life eternal. We rejoice that we were privileged to come in contact with and have amongst us a humanitarian, a philosopher and a social worker who toiled incessantly to uplift humanity and to release the world from slavery, poverty, disease, ignorance, cruelty and war.

## ANNOUNCEMENTS

### I. STANFORD UNIVERSITY SCHOOL OF EDUCATION, CALIFORNIA.

"Social Education" will be the theme of the 1938 Stanford Education Conference, to be held at Stanford University, California, July 6—10. Among the leaders in American education who will take part in the program are *William Heard Kilpatrick*, Emeritus Professor of Education, Columbia University; *Lewis Mumford*, author and lecturer; *William Ogburn*, Professor of Sociology, University of Chicago; and *Ray Lyman Wilbur*, President of Stanford University.

Forum sessions during the conference will be devoted to discussion of experiments, investigations, and programs in social education and social control; to appraisal of practices and trends in the field; and to interpretation of the educational implications of American culture. The conference has been organized especially to appeal to those interested in guiding American youth to think creatively and act cooperatively in solving our social problems.

There will also be held, July 5 and 6, a Conference on Early Childhood Education to commemorate the 100th anniversary of the founding of the kindergarten. Among the leaders will be *Winifred Bain*, New College, Columbia University; *Julia L. Hahn*, Supervising Principal, Washington, D. C.; *William Heard Kilpatrick*; and *Lois Meek*, Professor of Education, Columbia University. The conference will stress growth needs and social direction and is planned for parents, health workers, nursery, kindergarten and primary teachers, social service workers, and school supervisors and administrators.

This is the sixth summer during which a conference on some phase of guidance, administration, or curriculum development, has been held on the Stanford Campus. Attendance at these conferences has increased from a few hundred in 1933 to over 1200 in 1937. Information as to fees and other details may be secured by writing to Stanford Education Conference, Stanford University, California.

### II. HANDBOOK OF INTERNATIONAL ORGANISATIONS

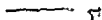
The Secretariat of the League of Nations has just published a new English edition of the Handbook of International Organisations, which is a companion copy to the last year's French edition. The volume gives, on nearly 500 pages, the names, addresses, names of officers, notes on finances, objects and activity, and other details of nearly 760 international organisations. Included are international bureaux placed under the direction of the League, official central bureaux and private associations and federations in so far as they have international objects and are not run for profit.

In order to facilitate the use of the Handbook, the organisations have been classified according to their objects or activities in the following groups: Politics and International Relations (Pacifism); Religion (Humanitarianism and Morals); Arts and Sciences; Education; Students'

and University Organisations, Medicine and Hygiene, Law and Administration, Press, Feminis, Labour and Professions, Agriculture, Economics and Finance, Trade and Industry, Communications and Transit, Sports and Tourism, Miscellaneous. In addition, three indexes have been provided for further convenience of the user: a subject index, an alphabetical index, and a geographical index. From the last, it appears that nearly half the total number of international organisations have their seats in France and Switzerland. There are 183 in France (172 in Paris alone), and 140 in Switzerland (80 in Geneva). Great Britain follows next with 78 organisations, and Belgium close behind with 77.

The Handbook will prove invaluable to all those who are engaged in international life. Price 12s 6d.

—The Secretariat of The League of Nations, 8 Curzon Road, New Delhi.



## BOOKS FOR TEACHERS

THE PSYCHOLOGY OF LEARNING & TEACHING—By H. S. PERRERA, M.A. (Lond.), Principal, Government Training College, Ceylon, Pp. 228, Rs. 3/-

SUGGESTIONS FOR THE TEACHING OF ENGLISH IN INDIA—By W. M. RYBURN, M.A., Christian High School, Kharar, *Second Edition*, Pp. 168, Rs. 2/-

THE TEACHING OF ENGLISH IN INDIA—By M. S. H. THOMPSON & H. G. WYATT, *Fourth Edition*, Rs. 2/8/-

AN INTRODUCTION TO MAPWORK AND PRACTICAL GEOGRAPHY—By JOHN BYGOTT, M.A., B.Sc., *Second Edition*, Pp. 246+viii. 8s. 6d.

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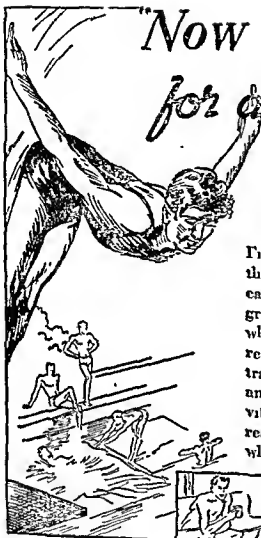
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## Editors' Note

The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments, (d) articles containing statistics and their application to the solution of educational problems, (e) short notices of original works, (f) news of interest to educational workers

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- (2) To encourage scientific investigation in educational sphere and to stimulate statistical enquiries or those relating to experimental projects
- (3) To consolidate a public of those who, finding it impossible to be indifferent about the educational drift of India believe that a concern for the health of educational criticism is immediately relevant to the political and economic urgencies of the time
- (4) To provide a mouthpiece for Indian educational thinkers and researchers
- (5) To strive for World Peace through Education

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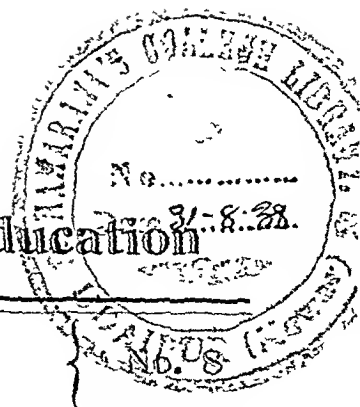
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TO LET

# Indian Journal of Education

Vol. III

AUGUST 1938



## \*PROBLEMS OF VOCATIONAL EDUCATION

BY

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The term "vocational institution" has a much wider meaning than for what it is generally used. It should include all institutions which train men and women for careers in life, unless education should be a hobby and not a preparation to earn one's livelihood. In a more restricted sense the term excludes only such educational institutions as impart general culture. But this luxury can be indulged in only by a fortunate few. This is the logical meaning of the term but the usage of words is not governed by logic. The conventional definition is more immediate for our purpose. We now use this term for only such institutions as impart education in specialised branches of training for industrial, commercial, and agricultural professions of the undergraduate and pre-university standard.

The natural question arises—when should a boy or a girl enter a vocational institution and whether vocational education should be imparted along with general education in ordinary schools.

As an adjunct to general education such training cannot be wide and intensive enough to fit a student for a career in the line, and so should not be called vocational training. It can only impart a technical bias and some of the students may find technical lines more suited to their talents and aptitude than general education. It helps the guardians and the teachers to some extent to sort out the students to be selected for different lines. From the pedagogic point of view some kind of manual work is absolutely necessary for Indian students who are more prone to speculation

\* Extracts from the Presidential Address of the Vocational Education Section of the 13th All-India Educational Conference.



and less alive to the objective side of life. Moreover it gives their brain a little rest and they enjoy the joy of creation. A student taking up any technical career, and for that matter all students, should develop the power of observation. The teaching in our schools is very defective in this respect. In the elementary classes the students should be asked to observe in detail the changes that occur in the animal and vegetable world and compare them with the printed illustrations. The way these subjects are taught frustrates the purpose with which they have been introduced into the curriculum. These should not form parts of examinations. The teachers should try only to rouse the interest of the students, and sharpen their power of observation. Another subject which is neglected in schools is Drawing. Drawing is the language of engineers and technicians. A scale drawing of any object or machine with section, projection, plan, elevation, etc., explains more facts about it and makes it more vivid than pages of written description of the same. This teaching develops in the students a sense of proportion as well.

The question now arises—at what stage should a student join a real vocational institution? This problem in our country, in the present conditions of spread of education, involves many factors. In Europe and America where primary education is compulsory the students begin to join vocational schools just after the period of compulsion is passed. Every one has to earn for himself and according to the social tradition and convention prevailing does not become dependent on relatives. Literacy in India has spread up to now amongst only about 10 per cent of the whole population. The caste people have not yet been economically so oppressed as to eliminate the caste and family pride to an extent which would drive them into manual work of the artisans. The joint family system is also responsible for the wasteful continuation of general education by students who have been found unfit for it. They will beg, borrow or be dependent on even distant relations to enable them to continue their studies in schools and colleges which have repeatedly declared them to be failures. And at last when every avenue for general education is closed to them they enter vocational institutions with an inferiority complex. There are of course exceptions and this state of affairs is changing but with very depressing slowness. Moreover the number and kind of vocational schools fulfilling the industrial needs, local conditions and capacities of the students are found wanting. It must be admitted here that the number of students attending the vocational schools of all sorts has increased about fourfold during the last thirty years, but it must

also be recognised that industrial development of the country has increased at a more rapid rate.

We may now consider the nature of the needs of the country for vocational schools. The present-day easy means of communication is shortening distances and breaking up barriers between different parts of the world and the economic life of different countries is rapidly approaching similarity. Every country is being industrially developed and trying to be self-sufficient and self-supporting as far as possible. Individual characteristics are disappearing almost to intangibility. The social life undergoes metamorphosis owing to economic conditions. However much we may vocally assert the distinctiveness of Indian life from the rest of the world those who have eyes to see, cannot deny that we are, gradually and in spite of our protests, advancing towards the western mode of life and living, and consequently our vocational educational system will have to be modelled according to the patterns existing in other industrialised countries. Of course, modifications have to be introduced to suit the present economic life and spread of general education in India.

Which kind of vocational schools should be started? To find a solution of this problem let us enumerate briefly the subjects that are taught in other countries specially in Germany. Germans, in every sphere of life, are very methodical and they plan their activities to the minutest details and with utmost efficiency and thoroughness. The compulsion to attend school is universal. It is realised through the elementary schools which consist of 8 one-year classes and the following Fortbildungsschule (continuation schools) which carries the scholars up to the end of the eighteenth year. In both these schools teaching and educational appliances are provided free. In other words, every young man or woman under the age of 18 (with one or two specified exceptions), no matter where located or how employed, must attend school. The eight years' study in the elementary schools is not enough; average students finish the elementary school course at the age of 14 and then they step into the higher general educational schools or must enter the continuation schools usually at the age of 14. Since between the ages 14 and 18 the great majority of the population belongs already to the class of workingmen employed in some firm or factory these continuation schools are for all practical purposes vocational schools. These schools are by law maintained by the industrial guilds, unions of artisans, chambers of commerce, trading corporations and such other economic establishments. The State, the city and local governments are also responsible for the founding of such institutions wherever

necessary. The tendency is to treat these schools more from the standpoint of their economic significance for the country than from that of their character as educational institutions. The inspection and legal control are vested, therefore, chiefly in provincial ministries of commerce, industry, forestry, and agriculture and only to a very small extent in the ministries of education, science and art.

The different types of such continuation schools where the students are already apprentices are the following:—

(i) Trade schools—The course covers 3 years. The subjects taught include general principles of commerce, business correspondence, German composition, accounting, book keeping, economic geography, and civics. In commerce special attention is directed to transportation, banking, and business law.

(ii) Industrial schools—i.e., schools for handicraftsmen. Three principal subjects are taught. First and foremost is the study of raw materials, machine tools and appliances as well as the manufacture or constructions of goods. Then comes the study of business side of production, including the knowledge of credit, banking, money, export, import, calculating of wages, prices, costs etc. Finally the students get a general idea of law, civics, sanitation, cultural institutions of the land and last but not the least, economics.

(iii) Factory schools—These schools are maintained by the great factories and workshops for the benefit of their raw recruits and apprentices. The curriculum is as comprehensive as in an ordinary technical school comprising, as it does, engineering in its different branches, general science, German composition, accounting, civics, drawing, economics, and cultural history. Physical exercise, gymnastics, sports, etc., demand special attention on the part of the authorities.

(iv) Railway schools—These are maintained by the Railway factories and workshops for their apprentices and workmen, and the curriculum is similar to the one mentioned before with variations to meet the special needs of the railway work.

(v) Mining schools—Same as above with variations to meet the demands of the profession.

(vi) Rural schools—These are adapted to the needs of the boys and girls living in villages who are in one way or other engaged in helping their parents in agricultural works. But these are not, strictly speaking, agricultural institutions, their

character oscillates between an ordinary school and a technical professional school of an all-round character.

(vii) Schools for working women:—Vocational schools for girls belong to four categories, *e.g.*, domestic science, agricultural, commercial and industrial. The institutions are meant for young women actually employed in domestic houses or factories. The courses cover in general the following branches of knowledge: German, sanitation, civics, cooking, household work, needle work including dress making, nursing and care of children, gymnastics, sports, music. The professional lessons comprise book-keeping, drawing, short-hand, type-writing, etc., and are indeed the same as those for men described in sections (i) and (ii).

Besides these continuation schools which the boys and girls between the ages of 14 and 18 join after finishing their education in the elementary schools there are the “*Fachschulen*” (schools for special industries) which demand the same entrance qualifications. A few words must be said first regarding the highest technical colleges which are called “*Technische Hochschule*” in Germany.

The industrialisation of Germany as that of other countries has been brought about by many factors. As a rule outsiders cast their eyes on the *Technische Hochschulen* which academically and socially enjoy the rank of universities, as the chief if not the sole spiritual sources of Germany's industrial might.

On an intensive examination, however, one should be inclined to revise one's impressions and judgments. One discovers that Germany is a veritable jungle of industrial, professional and other institutions. Their name is legion and they are bewilderingly complex.

It is this vast number of technical schools of all denominations, distributed as they are in every nook and corner of Germany that has democratised inventions, discoveries, industrial skill, practical experience and scientific knowledge among the masses of German population. The backbone of industrial Germany is built up on the nature furnished by these schools which though bearing the modest name of “*Schule*” have not failed to maintain a standard of tuition sufficiently high, such as may enable the scholars to take charge of factories and workshops as responsible managers and experts.

“Industrial research” is a problem for which perhaps in most cases the best equipment can be secured in a *Technische Hochschule*. In order to equip oneself, further, as teacher of industries for a technical institution one generally provides one-

self with the training and discipline such as are available in a Technische Hochschule. But those whose chief interest lies in the building up of factories and workshops find their aims invariably best served in such technical schools as are known as Fachschulen.

These Fachschulen which the girls and boys join after finishing their elementary school career may be classified as follows —

(i) Schools of architecture — Courses are of about three years' duration. Students have to pass an entrance examination and must have previously worked as an apprentice for about one year to an architect. Students leave the school with certificates in overground architecture and underground architecture. The curriculum includes general culture, economics, and special subjects needed in the line of work. There are about 70 such schools in Germany with about 13000 students on the roll, and these institutions are maintained by the State.

(ii) Schools of metal industry — These schools impart training in machine making, mechanical engineering, and all kinds of metal work. Students are generally admitted after at least 4 years' training as apprentices or workers in factories. So age of the students varies between 20 and 30 years.

(iii) Schools of manufacture — At least three years' practical work in factories after elementary public school course is the pre requisite for admission. The curriculum is finished in two years. There are two types of courses — manufacturing side of the industry and engineering side of the industry.

(iv) Schools of spinning and weaving

(v) Schools of industrial arts and handicrafts — Every conceivable art and craft has its special school in Germany, and where it is not possible to institute a full school certain classes in the schools or museums are devoted to the subject.

In these institutions the training of taste is provided for the representatives of every industry. Accordingly there are separate classes for carpenters and manufacturers of furniture, house-decorators, painters, modellers, sculptors in wood and stone, wood carvers, metal workers, die cutters, blacksmiths, silver and gold smiths, enamel workers, designers, painters of advertisements, printers and compositors, book binders, glass painters, glass cutters and porcelain artists. For women there are special classes in weaving, knitting, needle work, embroidery of all sorts, clothing fashions and garment making.

In each school the studies are oriented in three directions. First, there is the artistic aspect of every craft. And for this the scholars have to take general drawing, calligraphy, drawing of plants and animals, nature study and water colour painting. Secondly there is the technical or manufacturing aspect. The corresponding studies are construction, details of the special subject, and raw materials. Finally there are courses of book-keeping, calculation of costs, industrial legislation, and civics.

The scholars must be at least 17 years old and must have practical experience in the crafts. The schools are visited not only by youngmen and women who seek a full training which lasts often about 4 years and generally  $2\frac{1}{2}$  years but also by elderly people who come in for certain courses in order to learn something new for their crafts as well as by artisans who, while employed as assistants in some studies, seek to advance their knowledge by attending evening classes.

(vi) Schools of mining:—The object of these schools is to turn out technical officials, engineers etc. for the mines.

(vii) Schools of navigation:—Navigation comprises five different kinds of sailing each with its own technique. So there are five different schools or grades—(a) coasting, (b) small or short distance sailing, (c) fishing in high seas, (d) piloting, (e) long distance shipping.

(viii) Technical schools for special industries:—

A. Metal industries:—(a) Smithies of all sorts, (b) Installation industries—water, gas, heating and ventilation telephone, typewriters, sewing machines, automatic calculators, cycles, gasmeters, water meters, photographic and cinema apparatus, gramophones, electrometers, etc. etc., (d) Clocks and watches, (e) Precious metals: the course covers three years and comprises lessons in goldsmiths' work, steel cutting, embroidery in silver, etching, coloring and printing on metals, foundry work, casting, etc. etc.

B. Wood work:—(a) Carving and cabinet making, (b) Toys, (c) Carriages, (d) Musical instruments etc. etc.

C. Chemical industries:—(a) Paper manufacture, (b) Dyeing, (c) Soap-making.

D. Ceramic industries:—(a) Bricks and tiles, (b) Porcelain, (c) Glass.

E. Photography.

F Leather industry

G Garment making and tailoring

H Food Product

The description of the system of vocational education given here is that of one of the most methodically planned and highly industrialised countries of the world. The conditions prevailing in India are different but we can take lessons from this system for a beginning. The cry that India is having too much of general education is miscalculated and misleading, we should not curtail but rather expand it. What we need is more education and education of all sorts. Vocational education should be given the same honour as is paid to general education. Students who are found deficient in the ordinary schools are not necessarily less intelligent. The tests to which they are put and by which they are declared unfit are not the only tests to judge their intelligence and abilities. Even in this undeveloped state of our country we find that the so-called failures in schools prosper in life. The sorting out of students for different lines of training should start after they have finished the elementary education. This will effect a vast saving of manpower as regards time, human energy and human intelligence. Most of the so-called failures in our schools are to a large extent due to the usual absence of linguistic abilities. In England, France, or Germany an insignificant percentage of the whole population has the same knowledge of a foreign language as is possessed by an average student in a High English School in India. So we will have to change our measuring stick and not make a fetish of knowledge of the English language.

Once we admit the usefulness of vocational education we should now see how we can provide for the same. In Messrs Abbott and Wood's report they have warned against the admission of more students in vocational schools than could be absorbed by the existing industries. Apparently the authors have always in their mind large scale industries. But as shown in the case of Germany there are vocational schools for every conceivable human activity and employment. The securing of service is not the criterion of usefulness of any systematic training. There will always be some who will not be able to utilise any kind of training, they are perhaps temperamentally unfit for jobs, they will continue learning new arts and crafts till they find a suitable one.

The Government of Bengal has already started a few vocational schools and we are thankful for the same. But very

much yet remains to be done. We need not be guided by Abbott and Wood who look at most things from the insular British point of view. The Government pleads want of funds and not want of good intentions. One way out may be suggested as a beginning. There are some private vocational schools in and round Calcutta. Government should recognise them and with advice and some financial help remodel them. The proprietors or Managing Committees, as the case may be, of such schools will resent government interference, because government connection, in most cases, meant in the past absolute government control, irritating red-tapism, and rigid formalities. The Government will have to change their methods and approach people in a genial conciliatory mood. I am speaking from personal experience. I am connected with a college of Engineering and Technology founded in 1906 which has trained and sent out more mechanical, electrical, and chemical engineers than any other single institution in India and yet we have never met with much encouragement from the Government. Perhaps we are also somewhat stiff-necked and can't bow down sufficiently to please the authorities. But with proper good intentions on both sides there can be found a *via media*.

So, to start with the expansion of vocational schools these private enterprises should be helped, regularised, and remodelled and made more efficient. The remodelling should be done along the following lines:—

(i) The medium of all instruction should be the mother tongue as far possible.

(ii) As a pre-requisite, teaching of drawing should be made compulsory in the primary and secondary schools.

(iii) Curriculum should be drawn up for every line of training on a scientific basis, because every art if critically looked into will be found to have a scientific basis.

(iv) Economics of the trade or manufacture should be taught.

(v) Book-keeping, accounting and cost calculation are absolutely necessary parts of the training and want of knowledge in these subjects has been the cause of the failure of many public and private enterprises.

(vi) Knowledge of marketing of raw materials and finished goods of the line of training should be thoroughly taught to the students.



(vii) Cultural education embodying the study of the mother language, national history and civics should not be neglected, because we want that students coming out of these schools should be as much cultured gentlemen as any body else

To cut down expenses the space in the schools should be utilised as much as possible. Classes should be held in the morning, at noon, and in the evening leaving intervals for cleaning only

The existing general schools and college buildings can be utilised for lecture classes of the vocational schools, while for practical classes accommodation can be arranged with slight additions and alterations

A regular survey of such nongovernmental public and private vocational institutions should be made by the Government through the Department of Industries and new lines of vocational education may be opened after full consideration by an expert committee. The existing schools should be thoroughly overhauled where necessary and curriculum drawn up on a scientific basis

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## NEW AREAS IN INDUSTRIAL ARTS

BY

R. A. HINDERMAN,

*Supervisor of Industrial Arts and Vocational Education  
Denver Public Schools.*

Developments, improvements, and innovations in the industrial arts curriculum have been the rule rather than the exception during the last decade. Since skill and vocational aspects of industrial arts have been stressed in the past and doubtless will continue to be important in the future, it seems well to consider some of the newer areas of the industrial arts curriculum that are rising to positions of importance in the present social scheme.

Great opportunities seem to present themselves in developing the pupil's understandings and knowledges of the complex mechanical aspects of the environment; in creating pupil sensitivity to significant problems; in providing consumer education relative to the wise purchase of mechanical commodities; and in assisting pupils to acquire social attitudes that tend toward actions which result in the achievement of personal and social ends.

Pupils can develop a working industrial background through a study of the mechanical aspects of the environment in their industrial arts courses. Following is an abbreviated list of devices and situations that require industrial intelligence of individuals if they are to adjust themselves to them satisfactorily: using automatic hat and coat lockers, operating automatic heating plants, city boy on a farm, experiences at an amusement park, operating an automobile, operating a furnace, polishing floors, running a small motion picture projector, running an elevator, using shoe shining machines, taking motion pictures, taking auto trips, following traffic lights and signals, using hand tools, using modern household conveniences, using automatic machines for inflating tires, and recharging water softeners.

It also seems very important for pupils to know that: molybdenum will soften the spring ride of automobiles; forty-three per cent of all steel is produced in sheets and strips on rolling mills one-half mile long—costing twenty million dollars each; eighty-three different steels are used in automobiles;

carbon makes steel brittle, chromium is the basis of the stainless steel industry, tungsten alloys strengthen with heat, activity in the steel industry is at the 1929 peak, while fifty per cent as many men are employed in production and fifty per cent more in distribution than before the depression, one pound of molten glass can be spun into a thread that will reach around the earth, glass alone is being used for eighty foot towers in new buildings in Detroit and New York, there is a new type of safety glass which is seventy per cent stronger because it bends, glass has been found to be an excellent road surfacer and can be made from broken glass receptacles. Information about the foregoing is being acquired through independent investigations and written reports by industrial arts pupils. The information that pupils gain by this enriched program assists them in making intelligent decisions relative to their adjustments to the mechanical aspects of the environment. It represents the kernel of an industrial background and is the basis for developing industrial intelligence.

A second new area of emphasis has to do with the development of pupils' sensitivity to significant problems. It represents a more extended and intensified attack upon some of the problems that have characterized the teaching activities in industrial arts since its beginning. This new emphasis seems warranted because of rapid technological changes and has made the problem of helping pupils see relationships a very vital one rather than one of only incidental importance. A list of examples follows.

### Mechanical Problems.

*Symptoms*—Sparks fly when plugging into socket

*Problem*—Remove plug from socket and remake connections in plug

*Symptom*—Odor of gas in room around stove

*Problem*—To shut off all outlets and test for leak by soap suds method and tighten same

*Symptom*—Clothes come through wringer dripping wet.

*Problem*—Tighten rollers or replace with new rollers

*Symptom*—Clattering, shuttering vibration of a faucet

*Problem*—Remove worn ball or gasket and replace with a new one

*Symptom*—Water continuously running through commode

*Problem*—To place new vacuum cup or adjust it to fit opening

*Symptom*—Cold winds blowing in around doors and windows.

*Problem*—The weatherstripping of all doors and windows.

*Symptom*—Going down a steep hill the car moves too rapidly.

*Problem*—Use the same gear going down the hill that you would use going up.

*Symptom*—Camp stove refuses to burn after fuel is put in tank.

*Problem*—Clean burners and unstop generator.

### Employment Problems.

Industrial arts pupils should study some of the following problems as they relate to the courses in which they are enrolled: scientific divisions of labor; production in industry; requirements that are generally necessary for success as a semi-skilled laborer; the industrial worker and leisure time; the speed requirements of industrial occupations; strikes or labor disputes and the various methods of settling them to the best interests of all concerned; economic status of employer and employee; bonus systems in industrial shops; industrial accidents and their prevention; labor unions and their characteristics; the effect of emotional disorders on the workers; the effect of working conditions on health; and the advantages and disadvantages of learning an occupation by the apprenticeship method. A knowledge of relationships and conditions such as the foregoing is the basis of sensitivity to significant problems and enables a pupil to gain a more discriminating power of analysis as he gradually grows and seeks the meaning of new relationships and changing conditions.

A third new area to be considered is consumer education. The consumer is not only confronted with the wise distribution of his budget, but also with the choice of commodities in terms of quality and service. The latter is a difficult task in these days when so many rackets are in vogue. It seems important to have the boy consider a commodity on the basis of: conditions in use, qualities necessary for satisfaction, cost, use of article for the purpose and in the manner intended, protection from wear and damage not necessary in use, importance of making necessary repairs and adjustments properly, and the proper care of an article when in use.

One of the most baffling of these problems is how to determine quality. Consider the following examples:

*Furniture*—in order to determine the quality of furniture one should consider such items as materials, finish, fastenings, joints, and hardware. Qualities of these items are listed in order of their desirability for most uses. *Materials*—solid cabinet wood, veneered with a cabinet wood. *Finish*—varnish lacquer, shellac, and wax. *Fastenings*—glue, screws, nails, and corrugated nails. *Joints*—mortise and tenon, dovetailed, dowelled, miter dado, splined, and butt. *Hardware*—solid, plated, enameled, and plain steel.

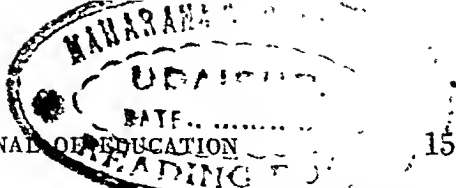
*Cottage*—points of primary importance to consider in buying a cottage might be mentioned as follows. (Possibilities are listed in order of their desirability.) *Foundation*—brick, cement block, tile blocks, concrete, and cut stone. *Roof*—slate, composition slate, shingles, composition shingles, paper composition (surfaced), and paper composition (unsurfaced). *Weatherboarding*—yellow poplar, redwood, and pine. *Heating plant*—steam, hot water, hot air, and stove. *Water supply*—municipal, private company, and individual. *Sewage system*—municipal, private company, and individual. *Floors*—oak, maple, hard pine, and hemlock.

Much other pertinent information should be obtained before buying property, in an urban district especially. The following are some of the more important items: the tax rate, the assurance of a clear title, possibility of unpaid street assessments, permanency of water supply, possibility of flood, adequacy of the fire protection, insurance rates, accessibility of church and school, building restrictions, and contemplated municipal improvements.

Consumer skill and knowledge are of real concern to high school pupils because, as high school pupils, they are consumers and consequently the education is vitalized and functional rather than of the cold storage variety.

The fourth new area places added emphasis upon the development of social attitudes of intelligent tolerance and coöperation, which, in turn, are based upon an understanding of social interdependence. The error of much teaching at present is that pupils merely verbalize about social interdependence and do not really accept the fact and govern their practices accordingly.

One spring afternoon the writer was to accompany a class on a trip to a veneer plant, and the group had gathered on one side of the street awaiting the green light to cross to the cars that were to be used in traveling to the plant. As the green light came on three youngsters started across the street and as they neared the middle of the intersection two sewer cleaners emerged from a



manhole, covered with slime and grease. The three inconsiderate boys, on seeing the men, held their noses and made a wide circle, giving the men a feeling of resentful chagrin. Now none would have expected the boys to rush forward and shake these men by the hand, but knowing the need for having clean sewers it would have been the part of courtesy to pass the incident apparently unobserved.

Clearly this anecdote suggests a lack of understanding on the part of these boys in this instance. The experience of having participated in this situation where the attitude of tolerance and the feelings of persons were important, made it possible for the class to learn several of the real meanings of social interdependence. Needless to say the class discussions that followed the excursion were motivated, functional, and practical.

It will be very interesting to observe, aid, and evaluate the growth and development of the following new areas: assisting pupils in developing an industrial background; making pupils more sensitive to significant problems; informing them of consumer values and having them accept intelligent attitudes of cooperation and tolerance.

—Education, Boston.

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## WAR IS A CONTAGION

Whether it be declared or undeclared. It can engulf states and peoples remote from the original scene of hostilities. We are determined to keep out of war; yet we cannot insure ourselves against the disastrous effects of war and the dangers of involvement. We are adopting such measures as will minimize our risk of involvement, but we cannot have complete protection in a world of disorder in which confidence and security have broken down.

If civilization is to survive, the principles of the Prince of Peace must be restored. Shattered trust between nations must be revived.

Most important of all, the will for peace on the part of peace-loving nations must express itself to the end that nations that may be tempted to violate their agreements and the rights of others will desist from such a course. There must be positive endeavors to preserve peace.

America hates war. America hopes for peace. Therefore, America actively engages in the search for peace.

—Franklin D. Roosevelt.

## THE RESOURCES OF THE ENVIRONMENT AS MATERIALS OF INSTRUCTION

*Note* —This article is the second of a series which will present a study made by Mr Williams of the social foundations of rural school curriculum in western Bengal. The study is in three parts, (1) the resources of the environment as the materials of instruction, (2) the individual and social needs of the people as the content of instruction, and (3) cooperative community enterprise as the method of instruction. There is perhaps nothing new in this study except its organization which may prove helpful to those interested in rural education. The articles will be continued as space allows until the series is complete.

### Farm Service Occupations

The artisans who serve the farmer in the Bengal village are not numerous but they are nevertheless extremely important. The blacksmith usually has his shop (little more than a tumbledown shed in the corner of his own courtyard) near the centre of the village. His crude anvil, often fashioned from a steel railway sleeper or a goods wagon bumper, is mounted on a stump or a section of a hardwood tree trunk. Nearby are the bellows made of wood and heavy leather and operated by a wire and lever overhead. Usually a small boy either of his own family or one apprenticed to him by parents of the village sits on the earth floor and pulls the bellows while the iron is heated and reheated. His only other equipment consists of some tongs, chisel, heavy hammer, a light hammer, and a big earthen jar or tub full of water. The blacksmith is kept fairly busy—as busy as he wants to be—making and repairing implements for the farmers. He makes and attaches the plough points, he makes chas kodals, khurpis and grass sickles. Often he is found retiring a cart wheel. This is not a simple task. The tire an iron band about half an inch thick by two inches wide by three to five feet in diameter, is well coated with cow dung and heated in a circular fire. When hot and expanded the tire is fixed and as it cools and contracts it grips the wooden wheel. The blacksmith uses raw coal for fuel. He carefully hoards every piece of iron or steel he can lay his hands on. In spare time when there are no orders the blacksmith will make long spike nails, door chains and rings, crude padlocks and the like to be kept on display for casual sale. Often a man of the blacksmith group will become a specialist in some line such as bell metal work and confine himself to that occupation. The blacksmith is comparatively well off as village standards go. In addition to his trade income, he often has fields which the family cultivates.

It often happens that the men of the village make the blacksmith shop the gathering place for the discussion of politics. In the winter season the warmth of the fire is most attractive. A vivid picture of the social aspects of the blacksmith shop is given by L. B. Dey (7)\*. 'It is evening. The cows have returned from the fields and have slunk into their house. The women of Kanchanpur have shown the lamp in all the rooms of their house to scare away ghosts and other evil spirits which might lurk in them

\* Numbers refer to sources listed at the end of this article.

and most of the peasantry after the day's toil, are either smoking in the huts or making preparations for their supper. Kavera, however, and his son Nanda (the blacksmiths) are busy as in the day, for their toil knows no intermission except in the dead of night. It is true that the people who frequented the smithy during the day for little jobs are no longer there, but their place is taken up by friends who have come to enjoy an evening chat. But, friends or no friends, the father and son are never unmindful of their business. Vulcan senior and junior have just taken out of the forge a large piece of iron, glowing and red hot, have put it on the anvil, and are belabouring it with their hammers and scattering about particles of incandescent matter. Swish! Swish! Swish! go the paternal and filial hammers till the sound becomes changed after the iron has cooled and been dipped into the water, into dhip—dhap! dhip—dhap! While Kuvera and his son are at this exciting work, four or five people are sitting on a mat in the room. There was Kapila, the carpenter; Madan, the grocer; Chatura, the barber; Rashamaya, the confectioner; Bokaram, the weaver. After the hammering had stopped and the piece of iron had been again put into the forge, Kapila said to Nanda "Have you heard that Gobinda was taken this morning before the zemindar and warned that if he did not pay the mathot (tax) within three days he would be handcuffed?" There follows a description of the heated attack these men made on the rich and powerful zemindar in his oppression of the poor people under him.

Oxen which haul over hard surfaced roads are shod. This is usually done at the blacksmith shop. The ox is thrown and all four feet tied together. The small, thin half shoes are then nailed in place. A variation of this type of general blacksmith is the itinerant ox-shoer. He comes from a family of blacksmiths but has undertaken this work as his speciality. He carries his tools and materials in a pack on his back and appears at regular intervals at the homes.

The tinsmith, while not serving agriculture directly, is closely linked with the blacksmith in occupation. Tinsmithy is a growing village trade. From the kerosene oil tins which find their way into the most remote villages there is a plentiful supply of tin always available. Kerosene oil and the Singer Sewing machine are two products of the West which have permeated the rural life of Bengal. Tinsmithy requires some knowledge of chemistry, and some techniques which the blacksmith does not need and often does not wish to learn. In large villages, especially those which are near the weekly markets, there is a steady demand for funnels, cups, buckets, suitcases, lamps, kerosene oil pumps and similar products which can be made from tin. Buckets are as yet a luxury for the villager—he continues, to carry his water in earthen jar; but he uses in his home the small tin torches and cups which the tinsmith makes. The general storekeeper utilizes the services of the tinsmith for grain measures and rat proof containers.

The carpenter makes his contribution to agriculture. He does his work with very simple tools which include a hammer, a pull cut saw, adze, chisel, bow and usually a crude turning lathe. While the farmer himself is able to do much of his rough wood and repair work, there are tasks such as the shaping of the plough, making door frames, roof work and so on for which he must depend on the carpenter. The plough is made from sheshum or some other hard wood, being carved in one piece.



The carpenter often has his own fields and works at his trade only when the crops have been laid by. He makes the doors and windows for new homes, he makes the roof, he makes bed frames and the *taktaposh* (hard table bed), he makes the cart frames but not the heavy cart wheels.

Wheelwrighting is classified as a specialised occupation. Not every village boasts a wheelwright and village people often have to travel many miles to buy a pair of wheels for their cart. The wheel is made of a special type of hard wood and is a difficult piece of joining. Cart wheels sell for from Rs. 15 to Rs. 25 each and the purchase of a pair is a major undertaking for the farmer but if properly taken care of the wheels will last for years.

Wood sawing is usually a specialised occupation engaged in by experts who have their own equipment and work on contract. There are practically no power sawmills in the rural areas. The log is tipped at a sharp angle and one of the sawers stands on the up-tipped end while the other remains on the ground. The saw is pulled up and down the cutting being done on the down-stroke of the saw. These men are so expert that boards to the thickness of half an inch are *riwed*.

The wealth of materials which these occupations offer for instruction is indicated in the following:

- (1) In the making of iron products: building and banking fires, operating bellows to make heat, heating iron and holding heated materials, shaping malleable iron into plough points, *kodalis*, sickles, *khurpis*, ox shoes, tempering steel, use of salt water, fixing cart wheel tires.
- (2) In making the product available for use: attaching the plough point, attaching handles to sickles, chisels, etc., *shoeing* oxen—throwing and tying the ox, trimming hoof and nailing shoe.
- (3) In the making of tin products: gathering tin, cutting and bending tin into shape, accuracy in following patterns, soldering—proper use of acid and solder, riveting—suit case handles, locks, etc.
- (4) In the making of wood products: hand sawing, use of chisel and adze, hand turning on rope propelled lathe, nailing, joining, accurate measurement, knowledge of woods, their value and use, preservation of wood.

### COTTAGE OR HOME INDUSTRY

Rural industry usually means cottage industry. The work is carried on in the home of the artisan or in a shop adjoining the home. Sometimes the raw materials are advanced by a merchant or central agent who takes the finished product at his own price, sometimes they are purchased by the individual or group of workers who operate the industry. Some one of the group or family is engaged full time in the marketing of the product.

In Bengal handloom weaving (and its subsidiary occupations) is by far the most important cottage industry. The cotton mill has seriously affected the hand loom. The market has been flooded with cheap mill-made cloth and the profit of the handloom product has been greatly

reduced. The number of people employed in cotton spinning, sizing and weaving (by hand) in 1921 was 225,333, while in 1931 the number had fallen to 192,589 (8). The industry, especially spinning, had a sharp revival during the period when Mr. Gandhi was waging his war against foreign cloth. In view of the above figures there is a question as to whether this revival has brought any permanent value into rural living. Weaving in Western Bengal is done largely on the pit loom. The loom is fixed in the floor of the home, usually in a dark corner of the front room of verandah, and the weaver sits on the floor with his feet in the "pit" under the loom. Some weavers make fine artistic pieces of cloth, but most of the weaving is of a coarse nature. These coarse articles are cheaper and more durable, and the poor people can buy them. A fast weaver can make a profit of Rs. 20 per month. This is more than twice the amount earned by the unskilled day labour, but of course the product of the loom is not alone his work. The whole family assists, especially in the preparation of the warp and in the winding of the thread. Most of the thread used by the weaver comes from the Indian mills. The warp is prepared by winding the thread over a frame of sticks set in the ground at long intervals. Children become adept at this work as well as winding bobbing for the shuttles. Dyeing is usually the special work of a weaver family from whom all the weavers get their colored thread. The weaver gets his supply of thread from the mahajan (shopkeeper) and returns to him enough cloth to pay for the thread. The mahajan often manipulates the deal in such a way that he has the weaver at his mercy (9). Most of the cotton is produced in Western India and in the Punjab. Bengal is not a cotton country. However, the cotton "tree," large bushy perennial, produces a type of cotton which can be spun and woven. This plant is easily grown in Bengal. A healthy plant should produce two pounds of cotton in a year. Recently Mr. Gandhi and other interested in rural industry have put much emphasis on the opportunity presented by this plant.

The number of people employed in the silk industry has fallen from 50,393 in 1901 to 5,642 in 1931 (10). Seldom does one find a family of silk weavers. The various phases of the silk industry are carried on independently of each other. The rearing of the cocoons is done by one group, and the "reeler" or weaver often has to travel 100 or more miles to buy his cocoons. The reelers unwind the raw silk and sell it to Marwari merchants who in turn get the thread into the hands of the weavers. Owing to the primitive methods of the reelers the raw silk is often uneven in strength. Some of the weavers spin their thread from tussa or eri cocoons. This spun thread makes a very coarse cloth which is used for shawls and coats. From observation it would appear that the lot of the silk weaver is much better than of the cotton or wool weaver.

The weavers of wool are the poorest and fewest in number. The processing of wool is confined to the districts of western Bengal. Large droves of sheep pass up and down the Grand Trunk Road (hard surfaced highway between Calcutta and Delhi) grazing the rice fields after the crops have been harvested. The sheep are owned by wool merchants. The men who herd the sheep are very low in the socio-economic scale but they are expert at their task. Their families live in small villages where the women, children and old men card, spin and weave the wool into coarse blankets which are bought by the poorest rural folk. The herders not only

care for the sheep, but shear them and pack the wool for their masters. A portion of their wages is paid in wool. The weaving is done on a very small loom set up inside or outside the home with one end of the warp fastened to a peg in the ground and the other tied about the waist of the weaver. The crude loom frame is taut in front of the weaver as he sits on the ground passing the weft back and forth by a hand shuttle. A strip of blanket about 14 inches wide is made, and three of these strips are sewn together to form the finished blanket. The wool processors keep to themselves, living in small autonomous villages. They do not have extensive lands for agriculture, but use to very good advantage for vegetable and forage crops the small fields surrounding their homes.

Where sabai or other grass is available, rope making is an important industry and some 9433 persons are engaged in it (11). This is a commercial product, but what is more important, for this study of educational resources is the fact that straw rope is made in almost every village home. Straw rope is not sold but is used within the home for various purposes. Thick straw rope is used in the construction of circular grain binds for the storage of rice. Thin ropes are used for tying down newly thatched roofs. The straw is moistened and twisted between the hands into a continuous strand.

Another activity which is to be found in every home is the husking of rice. We may call this an industry because so many people get a livelihood from it. The work is done by women, usually widows with no other means of support. The worker receives a share of the husked grain as wages. The rice is husked by 'dhenki'. This crude leverlike apparatus is fixed in the ground in some place protected from the rain. The long heavy timber is pivoted near one end so that when the woman steps on the short end, the other end rises to a height of four feet or so and drops with its hammerlike point hitting the rice in the 'cup' of the stone or log hewn for this purpose and fixed in the floor. Usually two or three women work together, one or two operating the dhenki and another pushing the rice back into the cup as it is forced out by the impact of the dhenki. Before the rice is put under the dhenki it must be soaked and heated to loosen the husks. During a large part of the year women can earn their food. The rapid growth of the rice milling industry means the loss of even this small income to many women. The husking of rice and grinding of flour are activities which she can carry on in the privacy of her own home or in the home of a friend. Social restrictions prevent her from seeking employment outside the home.

All rural homes use mustard oil for cooking. The manufacture of oil from mustard seed is accomplished by a crude press called the 'ghani'. It is operated by oxen. The ghani is not efficient. So much oil is left in the cake (residue of the crushed seed) that modern oil mills find it profitable to buy this cake and make a further extraction of oil from it (12). The man who owns the press sells the oil in the nearest weekly market or through a middleman who takes it and adulterates it with cheaper oils for sale to unsuspecting buyers. The oil cake is bought by farmers for cow feed or fertilizer.

The potter is found where there is suitable clay for his work. He does his work on a wheel of wood covered with straw and clay. Under its momentum he moulds jars from six inches to four feet in height. After the jar is finished and thoroughly dried, it is placed in a crude kiln and

fired. Some potters are able to glaze their wares, but the ordinary pottery sold in the weekly markets is of the unglazed variety. In every market and in most stores one finds a supply of pottery on sale. The jars are fragile and have to be replaced frequently. In many sections there is the custom of breaking all the pottery in the home on one day of the year. New vessels are then bought and the potter receives the support of the community. During the months, January to May, the potter is busy making roofing tiles. The small half round variety sells for from Rs. 1/8 to Rs. 3 per 1000, while the large flat tiles sell for Rs. 45 to Rs. 60 per 1000.

The crushing of the sugar cane is a community event. The machine is obtained on hire and is set up near the cane field. Each farmer in turn brings his cane and puts it through the crusher, using his own labour and oxen. Nearby a sugar cane "khola" for boiling the juice and making the gur (raw sugar) is set up. The place becomes the rendezvous of the village while it is in operation. "The children come for chewing cane or to have a sip of juice while the old people resort to it for indulging in smoke and idle gossip." (13) Large quantities of this raw sugar are made in the villages. It finds its way to the market and shops where it is sold in liquid form, or in large chunks or moulded cakes. It is often eaten with puffed rice in the early morning or for lunch while travelling.

The food industries of the village are important for the employment they give. The preparation of "muree" (puffed rice) occupies the time of several widows in each village, and in many homes it is a regular duty of the housewife. The rice is heated on sand in a broken earthen jar from which it is swept with a whisk broom as it "puffs." This and another rice preparation called "cheera" (flattened rice) are eaten widely in the villages. Both are always available in fresh supply. Sweetmeats are made from curds and whey, and cane sugar is sold in the large markets.

It is not possible in this study to describe all the industries carried on in the villages. Others include tanning (by certain low or outcaste groups), tailoring (by the Moslems), basket making (by the Santhals), drum making (by the Dome caste), processing of tobacco into "Beeries" (crude cigarettes) and smoking mixture, the processing of bananas into oil, processing of jute into fibre and twine, and so forth. Many of these and even others enter the experience of the village boy as he moves in the larger "community"—that area of intervillage relationship. Experience in these and related activity gives a wealth of material for instruction:

- (1) The source of raw materials: directly from the soil: cotton, jute, tobacco, mustard, sugar cane, clay, bamboo; from grazing; wool, leather; from trees: silk worm (mulberry and castor), lac (wild plum, polas).
- (2) The care of raw materials: raising cotton trees, soaking jute, curing tobacco, shearing sheep and packing wool, skinning animals and curing leather, cultivating lac, rearing silk worms.
- (3) The change of raw materials into products for man's use: clay into jars and tiles; cane into sugar; sugar into sweets; mustard seed into oil; bamboo into baskets; cotton into

cloth cloth into clothes wool into blankets silk into shawls  
hides into leather, leather into shoes jute into twine straw  
into rope

- (4) The means of change—the machine rice husker (dhenki) the simplest machine potters wheel blanket loom silk loom (throw shuttle) cotton loom (fly) oil and cane presses sewing machines

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—Ushagram

### TEA ON THE TRAIN

Tea is one of those indispensable necessities of life, the value of which one is often apt to forget because it is so easily available. Inexpensiveness again deprives this princely beverage of the regard which is its rightful due. Nevertheless, moments come when one is forced to realize the unique value of the "cup that cheers." A contributor to the well known weekly journal of Calcutta, *Indian Affairs*, recalling a journey on a train writes

"Tea in the afternoon is delightful anywhere and anyhow, taken in a railway train on one's way from one place to another, it is almost perfect. The cost is great, you may say, compared to teas at home, but really, the price we pay in cash is the merest trifle, considering everything. Our bodies are tired in trains, hunger and thirst are recurrent, and when we happen to find a good hot cup of tea at the station where the train stops near the hour of four in the afternoon, it becomes much more than a purchasable drink and seems a direct boon from heaven.

"Here we are, lazily sipping tea, and looking out of our compartment window. These two acts, performed together, assume the proportion of a princely luxury. The fine flavour that comes up as one pours out one's tea is like a greeting from a dear one's voice."

—From *Tea News and Views*, May 1938

## ISSUES IN SECONDARY EDUCATION

BY

DR. HOMER P. RAINEY.

To those who are studying the problems of secondary education it is clear that numerous changes in life, some of which have been piling up over a long period of time and some of which are of more recent origin, are by their cumulative effect producing a crisis in secondary education.

Undoubtedly one of the most fundamental issues in the field of secondary education today has to do with the implications growing out of a system of universal secondary education for all youth. There is no principle of education that is more deeply imbedded in educational philosophy than that of universal secondary education, and coupled with it the principle of equality of educational opportunities.

This simple fact, therefore, is producing one of the most fundamental issues that we have ever confronted in secondary education. The issue may be stated in this way: Are we going to face frankly the implications of the system of universal secondary education and prepare programs adapted to the needs, interests and capacities of all youth of secondary school age?

Society is faced with the obligation of providing a secondary education for practically all of its youth of secondary school age whether it wills it or not. It is perfectly clear that the employment situation does not now demand, and will not in the immediate future demand, the services of youth under eighteen years of age, and that only a small percentage of youth under twenty-one years of age will really find worthwhile opportunities in employment. Society is faced, therefore, with the very practical problem of how to provide adequately for its youth under twenty-one years of age.

A proper concept of secondary education for the future seems to be that of a common education for a common life. Never before in the history of the world has there been such a community of living as there is today. By the development of means of travel and communication all people have been drawn close together and means for the dissemination of knowledge and information are making it possible for all people to hear and to know the same things. This is tending toward a need for a common culture. Furthermore, there is a leveling of life in the economic and political areas. Mass production of cheap goods coupled with high wage scales is tending toward an economic democratization of life, and the development of political liberalism is bringing the "mass man" into political control. Thus walls that have hitherto divided population into groups and classes are now being broken down and there is a general tendency toward leveling or democratization of life. The masses of men are achieving in increasing measure social, political and economic equality. Thus a basis of a broad and living common culture is emerging. Habits, customs, manners, and ways of thinking are fast becoming common to all groups and sections of our country. People in all classes in all sections

of the country hear the same radio programs, read the same books from public libraries, see and ride in the same kinds of automobiles see the same moving pictures, play the same sports, and share hundreds of other things in common. They attend the same kind of schools, colleges and universities, take similar courses, study the same text books and collect the same kind of an education measured in semester units. The common life comes whether or not we will it. The prime function, therefore, of universal secondary education is to provide a common education for the common life of the whole population.

The central problem of curriculum building for secondary education is to identify these common elements the experiences of all, and to prepare materials and procedures which will insure that all youth have an opportunity to share in these experiences. These common elements of a common life, therefore, ought to become the core curricula for all youth in the secondary schools. The building of such curricula will require a thorough and fundamental reorganization of the entire program of studies. These new materials should be developed and carefully graded for every level of secondary education from the first year of the high school through the college, and they should also be graded for different ability groups. It is my belief that this type of education is so much more important than any of the electives or later vocational courses that no school should omit the core curricula of general education.

A second major issue in modern secondary education relates to the kind of a program of vocational education that is needed for modern conditions. There is no doubt but that this issue of vocational education is one of the most critical in education at the present time.

In addition to the divergence between the increase of productivity and employment opportunities, there are taking place significant technological changes within industry itself which will further change the character of the work process. The scrapping of old equipment and the introduction of multiple units of automatic or semi automatic machines has not only reduced the number of workers employed but the amount of skill required for their operation has often been reduced. The repetitive nature of work has increased as has the labor turnover on particular operators. Furthermore, some recent studies of displaced workers disclose that the qualities which help men to rise to skilled jobs and high wages while at work are of limited use in helping men to readjust satisfactorily when the job goes and that the majority who did find jobs found them in industries or occupations other than those in which they were previously employed. Youth faces thus an occupational future in industry that is becoming more mechanized less concerned with highly developed mechanical skills less given to practical instruction outside the industrial plant and more insecure for one with a single vocational skill. In a word mobility has taken the place of fixity, and uncertainty the place of security.

A system of vocational education which would be adequate in such a changing situation should provide for training of a short term type far more diversified than ever before in respect to the fields in which the training is offered participated in by both industry and the school, and stressing opportunities for rapid and effective retraining. Such instruction of youth would become effective through the wider use of present promising beginnings of occupational and placement information that is provided through a well organized placement service.

Furthermore, such a system of vocational education should recognize a three-fold responsibility upon school, community and the employers. The schools should be required to provide educational opportunities for all qualified youth on the secondary level, designed not primarily to impart particular techniques, but to develop such an adaptability that shifting from one job to another is made practicable and further designed with such resourcefulness that youth in routine jobs will be able to find other life satisfactions in extra-occupational interests.

The curriculum should not be thought of as designed to give specific training for vocations. Its primary purpose should be to give preparation for intelligent participation in the experiences of life which are shared in by all people—for general living in a modern community. If properly organized with suitable electives, it will also supply a basis for the first level of specialization, which will be entered upon in the tenth or eleventh school year.

Modern conditions have brought into positions of importance parallel with those of the time-honored learned professions other callings, notable among which are engineering, business management, professional agriculture, and governmental service. Preparation for these callings is generally recognized as vocational in type. For the new professions courses of study are needed which are not included in the traditional pre-professional, classical curriculum. With diminishing emphasis on the classical subjects and increasing demands for new courses, confusion has arisen with respect to the terms, "liberal" and "vocational." The fact is that the only truly liberal education is that which furnishes the common background for cultured life. Liberal education is the education which prepares for intelligent citizenship. It is the education which insures that individuals have a general understanding of their intellectual heritage.

Whatever the period of schooling, the school should at all times aim to cultivate two types of intellectual maturity, two types of information, and two types of interpretation of the facts known to modern science and letters—one vocational in its interests and applications; one general, directly related to the common social life of humanity. At the beginning of secondary education, general education should be stressed. During the later years vocational education should come into prominence.

The third great field of importance in secondary education today has to do with the responsibility of the schools for the employment and vocational adjustment of youth. One of the crucial points in our youth problem which we have discovered is the steadily widening gap which exists between the completion of school on the one hand and the beginning of employment on the other for an increasing percentage of youth. The vast majority of youth drop out of school at sixteen, seventeen and eighteen years of age, and at eighteen years of age three-fourths of all youth are out of school. Our studies show that there has been a steady trend since 1910 to exclude youth under twenty-one from employment. Thus we have a period of three, four or five years between the time many youth drop out of school and the time at which they have a reasonable opportunity of being inducted into full-time employment. Society, therefore, is faced with the problem of finding some productive way to bridge this gap.

It is my belief that the schools are the only appropriate agency to assume this responsibility. However, it does not seem possible for



practical reasons that the schools can assume the entire responsibility. It must be shared by other groups, such as employers and governmental agencies, particularly the employment services.

Time will not permit more than a brief sketch of my concept of an adequate program to deal with this problem. The first essential step is the development of a cumulative youth census. Every state should have a continuous inventory of its oncoming youth. This inventory may well be a cumulative and extended school census and should include full educational and vocational data relative to all youth in the state under twenty-one years of age.

Such an inventory of youth ought to lay the factual foundation upon which a state should be able to approach the answer to such questions as the following:

1. What are the needs for services to youth in the state?
2. What are the institutional resources now available in the state for meeting these needs for services?
3. What, if any, additional services will be necessary to meet these needs?
4. What financial resources will be available for these needs, and what additional resources will be required?

The next essential step in such a program is the development of a new service—one which will successfully correlate the functions of the schools with those of the employers of labor. This can best be done through an employment service national in scope, and inclusive in character.

This service should have a central statistical office where the data should be interpreted and made available for use to the entire country.

There must also be a system for the dissemination and use of these data in industry, the schools, colleges, universities, and for all other interested groups.

There should be associated with this service in each community a guidance center for youth, in which all local agencies should cooperate in an analysis of community needs and opportunities, an analysis of individual youth's characteristics, guidance, placement and supervision of individual youth.

The guidance work in the schools should be definitely related in a functional way to this local employment service. Counsel in the schools, in order to be effective, must be more closely related to the placement of youth, for it is futile for the schools to try to counsel unless they also have some part in the placing of youth in employment.

—Public Education Bulletin, Pennsylvania

# \*PROBLEMS OF PRIMARY AND RURAL EDUCATION IN INDIA

BY

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It has now been recognised in every civilized country that the provision of adequate educational facilities for all children of the country is a fundamental and unavoidable responsibility of Government; but it is rather surprising to realise that the conception of this duty of Government is only of recent growth. In England even up to the Victorian Era, the prevalent idea was that the provision of educational facilities should be an avenue for the exercise of private generosity, rather than a responsibility resting with the State. The idea perhaps was that those who themselves had had the privileges and advantages of education would, if they had the necessary means, also provide educational facilities for their less fortunate brethren. It was anticipated that illiteracy would thus be removed from the country. Experience however proved otherwise.

The most important factor which led to the assumption of the responsibility for the provision of facilities of education by the State was the acceptance of the theory, both in the West and in America, that it was the inherent right of every citizen to have a chance, through education, to prove his worth and his value to the State. This conception of State responsibility, again, coincided with unprecedented commercial and industrial development in the West, placing at the disposal of Government, through taxation and otherwise, funds with which it was possible for the State to discharge satisfactorily their responsibilities in respect of education. This is why we find that the development that has taken place in the educational world of the West is so phenomenal and rapid.

Historical research shows that though universities were founded and encouraged by broad-minded rulers of India in the past, there is no record of a well-planned and well-organised system of Primary or Secondary education in India. Matters

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\* The Presidential Address of the Primary and Rural Education Section of the 13th All-India Educational Conference.

were not much improved under the East India Company and it was not until Macaulay's famous Minute that a definite policy with regard to education was laid down.

The policy however was that funds should be provided by Government for the promotion of the study of European literature and science through the English language alone. The policy had the support of many of the ablest of the Indian leaders of the time, the most prominent of whom was Raja Ram Mohan Roy. As a result of this policy a great impetus was given to the study of western progress and western methods. The policy found expression in the creation of universities and colleges for higher education and though it was the duty of Government to create a proper system of education from the primary stage to the university, it was apparent that concentration on higher education was the dominating feature of the educational policy of Government in India until very recent times.

The wonderful and rapid development of a national consciousness that expressed itself as dissatisfied with India's backwardness and its place among the nations of the world was, it must be admitted, the first fruit of the adoption of the policy whereby the ideas and ideals of the west were brought home to the leaders of India. It is quite possible that if the policy of Government had been to impart in the first instance elementary education to the masses in vernaculars instead of imparting western knowledge and western ideals to a privileged few, the development of national consciousness would have been neither so rapid nor so effective. But from the point of view of the creation of a universally literate population, the policy adopted has proved disastrous—so disastrous that we are now face to face with an appalling illiteracy of which unlike other countries, we in India prefer to form an idea by referring to the figures of literacy. This is so because the figures of illiteracy are so appallingly high that we are often loth to think of them not to speak of mentioning them in our reports. It is perhaps for this reason that our Census Reports give us the figures of literacy and leave us to calculate those of illiteracy.

It is not, however, true to say that the educational policy of the State has been entirely responsible for the deplorable state of primary education in our country. There is a prevailing tendency to be satisfied with a quantitative supply rather than quality. The result of this unfortunate tendency has been to regard any school which consists of a building, however dilapidated it may be, and a teacher, however impossible his qualifications may be, as satisfying the educational needs of the locality. Primary schools are now numerous but in almost every other respect they

are deficient. The great majority of the pupils are in the lowest class and go no higher. They derive no benefit from such schooling and lapse into illiteracy soon after they leave school. The curriculum is defective and not adapted to the rural environment from which the children come. The teacher is untrained and unenthusiastic. He is faced with impossible problems—the problem of teaching three classes single-handed—the problem of how to live on six or eight rupees a month—the problem of engaging and maintaining the attention of pupils whose parents are more or less indifferent to education—the problem of sustaining his interest in his work, when he is isolated from year's end to year's end, except for the single annual visit of the Inspector.

The aid which Government have been able to give to primary schools has been disproportionately small. It is no doubt true that the inability of Government to provide the necessary funds, has been to a great extent, responsible for the unsatisfactory condition of education in India, but it is equally true that a very large part of the money spent by Government on primary education has been frittered away in doles and thus wasted. Startling though it may be, it is perhaps no exaggeration to say that most of the primary schools that exist to-day may be abolished, without much loss to education.

The condition of primary education in our country is such as to compel the anxious consideration of the State, of the leaders of the public, of all interested in the welfare of the country. We are now on the threshold of a new era. Every province is now autonomous. But 'Provincial Autonomy' will have no meaning unless the province has an intelligent and informed electorate, capable of taking an intelligent interest in the economic and political issue of the day. Democracy can carry no sense unless it is founded upon a population, intelligent and enlightened enough to understand its many privileges and obligations.

We are faced with a very difficult problem. But if the activities of our leaders and of all who have in their minds the vision of a better, brighter and happier India are directed towards this all-important problem, we have no cause for despair. The condition of Denmark a hundred years ago, was similar to what we find at present in our country. To-day Denmark is so rich that men from many lands visit it to find out the secret of its prosperity. When an old Dane was asked by what magic his country was lifted from poverty to prosperity, he replied "There were three causes: the first, school; the second, better school; the third, more schools." As in Denmark so in India we should first have better school—then more schools.

The first step that is necessary towards this end is a thorough overhauling of the present system of primary education. It is, therefore, necessary to study the chief defects of the present system of such education. They may be classified as follows —

- (a) *Defects of the teachers* (i) Inefficiency—Meagre academic attainments and no training for work as teachers (ii) Inability to manage plural classes
- (b) *Defects of the pupils* (i) Irregular attendance (ii) Admission at any odd time of the year
- (c) *Defects of the parents* (i) Apathy (ii) Employment of children in field labour at an early age
- (d) *Defects of the Education Department* (i) Desultory and ineffective supervision (ii) Incomplete and unsuitable curriculum

If these are considered to be the real defects, it must be admitted that they are not such as cannot be remedied. I would like to take them one by one.

(a) *Defects of the teachers* —It is an obvious fact that most of the teachers now engaged in primary schools are inefficient and unable to do satisfactory work. Unless we can guarantee that the men whom we place in charge of primary schools and primary teaching are better trained and more interested in their duties than at present, then far from getting full value from the money we are spending, we shall be wasting the greater part of it. It is perhaps no exaggeration to say that existing primary schools all over the country are not doing much to remove illiteracy and even the small amount which we now spend on elementary education is being wasted. It is therefore a fundamental necessity that we must offer adequate salaries to primary school teachers and obtain a better class of men for the work. It is no use saying that we have no money. Whatever money we have, should be wisely spent in order to produce fruitful results. There can hardly be any justification for frittering away in doles the amount that can be made available for primary and rural education. And we should certainly have more money for the purpose.

I have just spoken on the necessity of there being a better type of teachers on adequate salaries, it may perhaps be helpful to be a little more specific. I see no reason why as a standard in future, we should not demand that all primary school teachers shall have passed at least the Matriculation and thereafter acquired the necessary training. At the same time I do not think

that the normal syllabus of work at present followed in High Schools is sufficiently general and extensive to give a teacher the necessary back-ground for work in a primary school. In a village, a teacher should be the leader of all progressive movements. Village uplift work, adult education, the application of improved agricultural methods,—all these should naturally spring from, and be inspired by, the village teacher. For this the teacher should have an adequate training.

It is not perhaps necessary that ambitious schemes should be lunched and stately buildings erected to provide for such training facilities. Training classes may conveniently be attached to selected High Schools in rural areas. Enormous expenditure on building and equipment would thus be saved and all the facilities afforded by a High School could fully be utilised. Training classes attached to a High School would have an additional advantage; they might serve as a check to the unnecessary and uneconomical drifting of many youngmen to the University at the end of the Matriculation stage.

One of the most difficult problems of a primary school teacher is the problem of teaching three classes single-handed. Most of the primary schools in India—specially in Bengal—are lower primary schools with only three classes. Most of these schools have only a single teacher each and the great majority of the pupils never proceed beyond the infant class. Three years of schooling under such conditions can hardly ensure literacy. But unfortunately new schools of this type are coming into existence everyday. Time has therefore come when a definite programme for primary schools of a higher standard should be made by every Province. A five or even six years' primary course would be most desirable but the cost of financing and staffing all schools covering a period of six years' course throughout a province, and on a compulsory basis would almost be prohibitive. A well-organised and well-staffed four-class primary school has been regarded by many educational experts as meeting the requirements of a fairly satisfactory elementary education. Again, it is no doubt desirable to have always as many teachers in a school as there are classes, but I am inclined to think that a four-class school even with three teachers of the right type may serve the purpose. The infant class may, in that case, be taken up separately by all the three teachers. Two hours' tuition for the infant class may be regarded as more than sufficient. The infant class may then conveniently be dismissed and after a short recess the remaining three classes may be taken up by the three teachers.

It may not perhaps be out of place to mention here that a mere well organised and well staffed four class primary school is not enough. Another factor is important—the schools must be well distributed. A recent survey of primary schools in Bengal has shown that most of the schools are ill distributed. There are approximately 64,000 primary schools in Bengal in approximately 1,00,000 villages. While there are about 64,000 primary schools in about 30,000 villages, there are about 70,000 villages in Bengal without any school. It is therefore desirable that a survey of the existing primary schools of a province should first be undertaken and every district should be divided into a suitable number of school units either on the basis of an average population or on the basis of an area. A population of 2,000 in the case of the former or an area of 3.14 sq. miles in the case of the latter may perhaps prove suitable. Japan, which now claims to have more than 99 per cent of its population as literate, divided the country into as many as twenty six thousand primary school districts when it started the scheme of elementary education in 1872.

(b) *Defects of the pupils*—Irregular attendance—This can be eliminated by the general introduction of compulsion. It is not possible nor practicable to introduce free and compulsory primary education in a province all at once—it would be entirely beyond the financial resources of the province. Moreover, as the last Indian Quinquennial Report points out “unless a system of compulsion is based on firm foundations, unless the majority of parents are actively in support, unless an ample supply of trained teachers is available, unless there is careful supervision and wise distribution of schools, compulsion will do more harm than good.”

There is, however, another type of compulsion which is absolutely necessary from the start to prevent the wastage which has so often been exposed and deplored. It is always the crowd in the infant class that enables the school to carry on and give it the semblance of a school. By the time the top classes are reached the numbers dwindle down to insignificance. It is therefore necessary that once a child joins a school, it should be compelled to remain at school till it has finished the primary course and as a corollary to this no child should, as a rule, be allowed to remain in the same class for more than 2 years. It is not unreasonable to assume that a parent who sends his boy to school wishes him to become literate, and he cannot very well complain if measures are taken to realise this end.

Admission to a primary school at any odd time of the year should, by all means, be discouraged. No progress in the infant

or the lowest class is possible if the teacher has to begin afresh with every new entrant. This is one of the reasons why we find so much stagnation in the infant class. Admission to a primary school should be restricted only to specified dates at the beginning of each calendar year. This can very easily be done if the rules regarding the admission to a primary school are a little modified.

(c) *Defects of the parents.*—India is an agricultural country. The average family in an Indian village lives on agriculture. Every male member of a villager's family, young and old, has to perform his allotted work in the field. Even very young children are often required to cut grass or look after the grazing cattle or do other minor work. The apathy of an average Indian villager to send his children to a primary school and thus lose their services in the fields is but natural. Again, his relatives, his neighbours and their children are as illiterate as himself and his own. Why then should he alone think of sending his children to school? He believes and believes sincerely that education will make his children averse to manual labour. Unless he can be made to believe—and this is absolutely indispensable—that education will not make his children averse to work but will make them better workers, he cannot be expected to get rid of his natural apathy. Primary education must therefore be made compulsory if it is to spread among the masses. Left to individual free will, it has little chance of making a headway among them. But until such compulsion is possible, some adjustment of school hours may be so made as not to interfere with the work the children of the ordinary cultivator are required to do at home.

It is not the indifference of the parents alone that is responsible for irregular attendance at school. Children find very little interest in the schools. Our schools are extremely dull and cheerless. Steps might be taken to make the schools interesting and attractive. Country out-door games and sports might be provided to give some recreation to the children and to make their school life less tedious. School houses may be beautified by pictures, well-chosen mottoes neatly written, maps, charts, etc., and the school compound by a neat little flower garden so that the children may feel proud of their school. To create an interest for the child in agricultural work and in his environment and to develop a taste for manual labour, attempts may also be made to attach a farm or a vegetable garden to primary schools.

(d) *Defects of the Education Department.*—It is now an admitted fact that supervision of primary schools by inspecting officers is not effective. Except the solitary visit of an inspector



for a few minutes during the course of a whole year, a primary school teacher has nothing else to serve as a guidance or stimulus. Circumstances often beyond control have no doubt partly been responsible for this inefficient supervision, as India, consisting as it does of a scattered population distributed over large area, with bad communication, cannot support an inspecting agency which will allow of any more than occasional visits to individual schools. But steps should certainly be taken to see that the number of schools under each inspector is not so large as to make it impossible for an inspecting officer to pay more than one perfunctory visit in a year. It is not perhaps necessary that primary school inspector should have very high academic qualifications. An intermediate passed candidate with necessary training, not only for inspection work but also for rural community welfare work, can prove quite a suitable primary school inspector. Even with the resources at our disposal, we can perhaps have a much larger number of such trained inspectors.

India is an agricultural country and the course of study in the primary school should be adapted to the needs and environment of the majority of the children. But the curriculum at present followed in primary schools is designed not to be complete in itself but to lead up to higher studies. The natural result is that while the country as a whole depends on its villages and on agriculture, every intelligent boy is drawn away to the towns and to occupations which can only be followed in towns. The country side is thus systematically drained of its most hopeful and intelligent elements. A primary course should therefore be a self contained course suited to the village child so that he may be able to grasp more quickly and intelligently the teaching given at school, with a rural bias and dealing with ideas and things which are a part of its background. Primary education for the village boy will mean not only a grounding in the rudiments of general knowledge but also in a way a preparation for his own vocation.

But all improvement of primary education hinges on the question of funds. In fact all educational schemes of a comprehensive nature require money. Where is the money to come from? I am sure that if we believe that all human problems find their fundamental solution in education, if we believe that all the evils from which our land suffers are mainly due to the lack of education of our people, if we believe that poverty, pestilence and industrial backwardness which make the life of the average Indian any thing but enviable are largely due to the meagreness of education that he had, and lastly, if we have faith in the sacredness of the cause of education, then both provincial

Governments and the public must co-operate, and money must be found to meet the expenditure involved in a scheme of universal, free and compulsory primary education. All that necessary is a change in the angle of vision. If people can pay rates and taxes, it matters little whether cheerfully and willingly or not, for the general administration of the country, for the amenities of a city life, then there is no reason to doubt that money will be forthcoming to give what is considered the fundamental equipment for the struggle of life to the teeming millions of our country. If we can but make every one who is interested in the welfare of one's country, feel the imperative urgency and vital importance of this problem, I am sure, the people will not grudge the small education tax that it may be necessary to impose to raise the necessary funds for the purpose. But all this requires propaganda and no national problem can be solved successfully without an extensive and sustained propaganda. In the country-wide propaganda of the type I visualize, everybody must join—officials and non-officials, high and low,—and the cry should go out from the Press and a thousand platforms that the nation is determined to banish illiteracy from the country and is prepared to make any sacrifice to achieve the end. Nothing stands out more prominently in our national programme than this problem of illiteracy and I am sure you will all agree with me in giving it the first place, at least for many years to come, in all schemes of national reconstruction.

## MY TRUST

I am a teacher—

And ardent, restless, longing youth

Look unto me expectantly,

Fulfilment of their dreams to aid

As I lead they follow

Oh, let me take the upper road

Leading to the heights

And they must follow.

A mighty trust is mine<sup>1</sup>

I am a teacher—

And trusting, childish eyes

Look unto me confidingly,

Their little hands in mine,

To follow me, to anywhere

Be my way on high or low or middle ground

They follow

O let me feel

What mighty trust is mine<sup>1</sup>

One there was

*Known throughout the ages*

And over all the world—

*The Great Teacher,*

Who leads forever to the Light

His name I bear

Oh, wondrous thought

That challenges my highest, best

I am a teacher

—CAROLINE S. WOODRUFF in *National Parent Teacher*

## DEVELOPING AN INTELLIGENT FAMILY ATTITUDE TOWARD MUSIC

BY

DOROTTY AND DAVID DUSHKIN.

In planning for an intelligent attitude of the family toward music, it must first be said that this attitude should begin with the child still in the cradle—not delayed until such time as the child begins to take instrumental lessons. Singing, dancing, musical games and rhythmic responses precede instrumental music by three or four years at least. The question so often asked us, “When should my child begin music?” is to be answered, “In infancy.” Children respond to music before they can walk, and they should be sung to, encouraged to sing and express rhythmic accent from this age upwards.

When the child begins to take instrumental lessons there should be maintained a conscientious open-mindedness about his native abilities and what he can achieve. It is very easy for parents to misjudge musical abilities and to become convinced, before their child has been really tested over a reasonable length of time, that he has talent. “Talent” is a very deceptive word; when analyzed, it is often found to have very superficial meanings. A child is better off not to be branded with it at first, and also, a family is much better off not to think of the beginner with any qualifying adjectives. It is too easy to be fooled. We have seen many so-called talented children “peter out” for no more apparent reason than that their gift was not as real as supposed, and we have seen a great number of so-called untalented children blossom out with real ability.

Another essential attitude in the first stage is broad-mindedness about the instrument chosen. A complicated, standard instrument is generally better withheld from the young child until he has had a satisfying experience with a simpler instrument. This simpler instrument must be of the highest quality of musical tone, however, and be perfectly in tune. An inferior instrument, incapable of being accurately tuned and musically played, is very harmful. During this introduction to instrumental music, his particular musical nature must be discovered and his coordination and idiosyncrasies studied. When he is ready for a difficult instrument, it can be chosen intelligently, not arbitrarily. Music

is not synonymous with piano lessons. It can be enjoyed through a great variety of instruments, all suited to different kinds of capacities. It is these capacities that should determine the instrument and not, as so often happens, the capacities made to conform to the given instrument.

Music lessons should be treated as a regular occupation, like the academic work, not as an "extra," so that the child will accept them in the same manner. It is important that there should be plenty of time allowed for music, and that the child should not be heavily scheduled with many after school activities. He cannot be expected to do his normal best if he has many irons in the fire which he is too young to discriminate between as to lasting value. The parent must choose for him and hold to his decisions. Music cannot be treated in the manner of light recreation if the child is to get any benefit from it in maturity. It is a matter of years, like the study of literature, and an over crowded schedule is generally the result of confusion of values in the minds of the parents.

The young student should be allowed to hear any fine music going on in the home or in accustomed surroundings. Formal concerts he can do without, but music in the family is inestimably worth while. A child cannot hear too much of good music which is spontaneous and done by those who like to play for the fun of it. If the family has no one to make music in the home it can turn to well chosen records and tune in one good radio concert. Children quickly develop interest in certain records and want to play them over and over. Many a surprised parent has related to us the insatiable appetite his four or five year old showed for records of symphony music. Try leaving a group of records accessible to your youngster and encourage him to amuse himself with them.

Passing to the second stage in the development—the attitudes appropriate to the student who has been studying for a little while—the family must still refrain from judgment, or at least from judgment expressed to him.

By this time, the problem of practice has to be met. It is necessary to talk to the teacher, come to an acceptable point of view about it, and then stick to it. There are several "don'ts" for families, which are vital to the success of the student's progress.

- 1 Don't choose a practice period which conflicts with much desired play activity. "Moral suasion" can conquer the temptation to play hockey, but there aren't many Spartans of this sort.

2. Don't allow the practice room to be invaded by any member of the family during practice time.
3. Don't nag. It is better to let the practice slip than to develop an unpleasant relationship between parent and child over it.
4. Don't assume that zeal in practice is the criterion by which parents can judge whether a child should have music or not. This is the snag which wrecks many a career, with the best of intentions on both sides. Think of music as you would of spelling or arithmetic. Would lack of zeal in these subjects make you drop them for your child? If you value music, it must be considered in the same way, even though it is in the unfortunate position of having to be paid extra for. Money considerations are too quickly applied to situations which have nothing to do with money. That is the saddest thing about the whole structure of present-day music education—that it should mean extra fees.

Again about practice: Music is also unfortunate in that daily supervised work is not allowed for it, as in spelling or arithmetic. Would you expect a child to do a half-hour's practice in arithmetic by himself every day? Yet it is expected in music, which is every bit as difficult a subject. Remember how difficult it is for an adult, let alone a child, to work conscientiously and daily by himself at any task before you criticize the music student.

One more "don't" is: Don't use arguments such as "Ten years from now you will be glad, etc." to incite ambition to practice. That type of remark, along with stories about famous musicians who were finally rewarded for their years of hard work, are arguments that are likely to fall flat—and rightly so. Justification for work is in immediate results. If a child has nothing but drill now and reward later, the education is wrong. His satisfaction should come from the pleasant music he is able to make at any stage of his career.

In the case of young children, it is always advisable to have more than one lesson a week, one preferably an ensemble lesson, and as little responsibility as possible thrown on them for homework. Three lessons a week without practice (unless it is spontaneous) is a good recipe for a young child unless the family has a helpful member to supervise practice. Few mothers qualify as practice supervisors. They are generally too prone to over-stimulate or become impatient; the mere fact that they are

the mother puts an emotional element into a situation which should be more impersonal. Sometimes a good natured house maid's interest in the child's practice provides the right sort of stimulus. Temperamental congeniality is an important qualification for the practice supervisor. Criticism during practice should be given sparingly and then as constructively as possible. Allow for times when the child seems to be just playing around. Those times may offer interesting sidelights on his development.

Before we pass to the third stage, the family can be reminded that the beginner can enter the family music group at a very early stage, if the family is sympathetic, and gain a real incentive thereby. An imaginative teacher can find or write simple parts for him to play which can be executed with little effort and provide enormous satisfaction.

In the third stage—after the student has been at it two years or more—it may be necessary to form other attitudes, although many of them remain unchanged. There may now be an indication for a change of instrument. While the student's inclinations toward another instrument should not be disregarded entirely, they should not be acted upon too quickly. Parent and teacher. How this can be done most efficiently exceeds the scope of this article. The main thing is an open-mindedness on both sides.

At this stage, the family may notice a slump in the student's work. There are inevitable slumps in the study of any subject. Progress is never even. At such times it is best not to make much of it, but try to bolster up the morale indirectly. Never accuse a child of losing interest at such times. He will very likely take refuge in such a remark and persuade himself that it must be so, and throw off any effort, or else, his pride will be hurt and he will grow resentful. Wait until a high moment to talk over his progress and point out room for improvement.

Parents also have to distinguish real progress from a deceptive facility. Some children have a dangerous facility. Playing by ear is a real gift, but it often brings problems of unwillingness to read. The child would rather guess at "how it goes." If this is not controlled at the beginning, it makes teaching him very difficult. In such a case, drilling on notes at home and encouraging him to read is a distinct help to the teacher. Also, the child with facility is a temptation to exploit in performance. He is easy to show off to friends, and he can develop a gallery eye which may interfere with his work. Showmanship is only healthy when guided and reinforced by ground work done for

sound reasons. The best way to turn this ability into constructive channels is through ensemble playing.

Then there is the "young virtuoso" complex, which, fortunately, is gradually diminishing. Nothing can do more harm than this attitude toward a talented child. Even if he is capable of virtuosity (which is extremely rare) he should remain unconscious of it as long as possible.

As to careers in music, they should never be counted on. The successful artistic profession depends upon inner convictions reached in maturity. It should not be wished upon anyone, no matter how complete the training is. Furthermore, it is our belief that the training of musician and music-lover should differ only in quantity and intensity, not in quality. The inborn musician will make himself known by his initiative and aptitudes, and is not to be regarded as one set apart.

In closing, we wish to reiterate that family ensemble music is the most worthwhile and wholesome supplement to any child's musical education. People who have had family music during their childhood never forget it. It enriches a home as much as any activity possibly can, and provides a medium of comradeship that is priceless. School orchestras are fine, but family groups are deeper in their influence, and supply the kind of relaxed enjoyment lacking in the competitive element present in school groups. Good music in the home, done for the fun of it, has more influence over the music student than any amount of teaching outside it. If your family cannot make it, you can invite in the neighbors, or if there are no musical ones, you have recourse to victrola records and radio concerts, or better still, to taking up the study of music yourself. Think of music not only as an art but as a language: a language that can draw parents and children together in a kind of understanding that no other language can equal. Its very other-worldliness has invested it, much too much, with a Sunday-best atmosphere. No more than art is only for museums, is music only for concerts. Make it a natural, everyday means of expression for the whole family.

—*National Parent-Teacher.*





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# THE ADVISABILITY OF INTRODUCING THE PRINCIPLE OF CO-EDUCATION IN THE EDUCATIONAL SYSTEM OF INDIA

BY

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Co-Education is one of the educational problems on which opinions are sharply divided. While some great educational thinkers see in it an instrument of national and racial decay, others praise it as the best preparation for life. Some would tolerate it from the point of view of economy and convenience. There are some who, though they sympathise with the ideals of co-education, yet feel that the practical difficulties to be faced are so great as to make them less likely to be successful than schools of other types. Unfortunately, the subject is one of which it may be said, "There is any amount of opinion on it, but precious little evidence."

The growing demand for education of our girls brings along with it most prominently the question of Co-Education, and indeed it is a problem which we have got to solve or we must prepare ourselves for total annihilation both moral and physical. In order to understand the merits and demerits or rather the advantages and disadvantages of Co-Education, we must have a clear idea as to the nature of education that is being imparted to the learners both boys and girls in this country. It may be admitted on all hands that education is not an unmixed good. All that we have got to do is to secure a marked preponderance of good over evil. We see every day that education brings along with it certain evils such as luxury, a spirit of license and in many cases a feeling of disrespect. Unless the entire system of education is changed, these evils cannot be avoided. When we consider the question of the education of our girls, we should try our level best to guard against the evils which have crept into the system in schools and colleges for boys and youths. Education after all is not an end in itself. It is simply a means to an end and that end is to mould the inner man by working out a moral

elevation in the taught by keeping him in a healthy and serene atmosphere of study where the natural aptitude of the students finds a free scope for its full growth

Now we have to consider what would be a fit atmosphere for the students, be they boys or girls. The difference between man and woman is so patent that it forces itself upon the eyes of even the most careless observer. This difference is a natural difference, and any attempt on our part to bridge over this difference would not only be futile but disastrous. A perfectly healthy atmosphere for boys would not be always a congenial environment for girls. Thus from the standpoint of natural aptitude, Co Education is not likely to help the desired growth either in the boys or in the girls. A learner at a school or in a college learns more from the environment than from the text books prescribed or the lessons given by the teachers. Now a days girls would surely be in the minority in the educational institutions and if their position is properly and carefully considered, one would find them as fish out of water. If you compel them to grow there, they will surely grow, but not in the spirit of girls, but in the spirit of boys. Again in institutions where there will be a majority of girls the boys will grow in the spirit of girls. But this is what we do not desire.

Apart from the question of Co education, the education of boys should not be left to women teachers and the education of girls to man teachers. In tender years the youthful mind is so soft and so pliable and in such receptive mood that when it is before its teacher, the whole personality of the teacher is projected upon the youthful mind, so much so that unnoticed by the most careful eye it takes a shape which even the adamant stroke cannot change. The importance of contact or companionship is universally admitted in the formation of human character. By character we understand figuratively the letters of a particular alphabet, but the real meaning of the word character is that. And just as the writing habit of a boy is dependent upon the copy book from which he writes, the character of a student is similarly dependent upon the teachers with whom he reads. The character of a boy or a girl of tender years is the sum total of all the qualities in the boy or the girl. The young boy or the girl has not as yet learnt the art of concealment, and a careful eye would be in a position to notice what shape the boy or the girl is taking, and under what influence. As time goes on, it becomes difficult to study the character of grown up boys and girls, but the influence remains all the same at work. Our own inability to detect the source from which the character of a boy

or a girl has taken a bend, should not make us blind to the ever-working influence excited by the teacher and the environment on the pupil. And in the impressionable tender years of the boys and girls the most careful and watchful eye should always be kept upon the pupils with a view to keep them as far as practicable aloof from such influences as are fundamentally in antagonism to their elemental nature. It needs no argument to affirm that the natural cravings of the hearts of boys and girls are so distinct and so marked that the intellectual hunger of one is not likely to be satisfied by the food which is naturally meant for the other. Thus we should always place our boys under men teachers and girls under women teachers, if we desire in them the growth of such healthy spirit as would elevate the moral tone of the society at large.

Man has been defined by the master minds as a rational animal. His animal instincts are exactly similar to those of the animal kingdom. All that he does is that he does not let loose his propensities and tries to keep them under control. He does it not always by virtue of his education, but mostly by virtue of the conventional rules of decency and decorum in the midst of which he is born and bred up. Those rules are in existence from time immemorial, and they were meant for helping the growth of a pure mind in the people. Even in spite of the rigours of the rules of society, we find animal instinct displays itself so powerfully in man that he does things exactly as if he were a bi-ped beast. In man the animal instinct is co-existent with rational instinct. When animal instinct gets the upper hand of the rational instinct, a man commits offences against the laws of morality and the state. It may so happen that the man whom I am ready to hate for his condemnable action, was never a disreputable man in the past, but at a particular moment his animal instinct became so very powerful that his rational instinct could not overcome it. And he tamely submitted to the authority of the animal instinct. Instances are not rare where men with heavenly purity in their heart have been found with red vices painted on their cheeks. Good and evil in man are very often circumstantial rather than fundamental. Circumstances play the most important part in labelling men either as good or bad. We should always be careful in creating such circumstances as may keep the animal instinct under chains. The free communion of man and woman has always been considered a circumstance unfavourable to the growth of spotless character. History and literature will bear eloquent testimony in support of this proposition, and it is not proper that we should arrogate to ourselves such strength of

rationality as would enable us to rise above animal instincts under all circumstances

A strict preservation of the rules of sexual morality is always considered extremely helpful to the growth of a healthy and serene atmosphere. And indeed every individual man if he wants to achieve greatness in life, must keep himself perfectly free from sexual vices. This is true for a nation too. Departure from the rules of sexual morality undermines the strength of a man as well as a nation both in mind and body. One who has lived the life of ideal purity as enjoined by the rules of sexual morality, retains all throughout his life the joy of a child, the vigour of a youth, the softness of a mother. But deviation from these established evils brings along with it a hoard of evils which sap the strength of the total fabric of the society. In fact the problem of sex is the Phoenix enigma before us. We must solve it or die. When we come in contact with the problem of sex, we find all human good and evil are dependent on the right solution of this problem. We see every day how man elevates himself to superman by following the rules of sexual morality and again how he reduces himself to a brute, pure and simple, by departure therefrom. Our boys and girls acquire certain developments at certain ages, and along with these developments there are certain cravings in them, and those cravings are always followed by efforts physical or mental, fruitful or futile. And all those efforts go to constitute the man or the woman. If the efforts are efforts for good, the result is that the man or the woman works out his or her moral elevation, while if the efforts are in the other direction he or she works out his or her moral death. Our mind is always at work and the imaginative youthful mind is all the more ready for work. If you give it scope, it will go on working without a stop. If you give it scope for good thoughts, it will be a thing divine. If you give it scope for evil thoughts, it will be a devil's workshop. If we place our boys and girls together, we shall be simply supplying them a larger scope for vain thoughts, most likely to bring about their moral annihilation.

Besides, the physical and psychological differences, the differences in educable capacity and in actual achievements of boys and girls in common subjects of study—all these make it imperative that the sexes should be taught in separate institutions, at least during the adolescent and post adolescent stage. These differences call for a differentiation of curricula in certain specific subjects, and also for a certain amount of differentiation in respect of method of teaching which make co education difficult, if not impossible. The large majority of girls look forward to

marriage as the only desirable objective in their lives, and to them should be given a training under suitable environment by providing for the teaching of such subjects as Music, Drawing, Painting, Housecraft, Biology, Hygiene, Cookery, Needlework, Laundry work etc., which fits them to take their proper place in the husband's home as mothers of the race. (It is gratifying to note that the Syndicate of the Calcutta University have included some of the said subjects in the curricula of the new Matriculation Examination for girl candidates to be held first in 1940.) Their aims in life are, therefore, different from a small section of their sex, who will have to make an independent living, and who can well afford to freely mix with the other sex, like their sisters of the western countries where social sanctions in the form of freedom of movement, freedom of marriages (both as spinsters as well as widows) and freedom of association with men, are not denied to women. Things are, however, very different in India. Here co-education is almost impracticable owing to the seclusion of women, the caste system and the absence of widow-marriage, especially among those communities in which these social restrictions obtain their most rigorous form. Owing to the operation of these social disabilities among the two great communities, the Hindus and the Moslems, co-education has been practically unknown in India for several centuries. There is, however, a lack of uniformity in these social usages in different parts of the country, e.g., while the purdah is rigorously practised by the Muhammadans all over India, it is practically non-existent among the Hindus of Southern India, unknown in Burma and among such communities as Brahmans, Parsis, Indian Christians, whose social customs closely approximate western practices. For this variation in social usages, anything like a nation-wide scheme of co-education is out of question in India.

Again co-education argues a freedom of movement and of association between the sexes, which has never received social sanction in this country. Here the social lives of men and women have been for centuries entirely different and have had very few points of contact. This freedom, thus, militates against the age-old customs and traditions of the race. Its dangers in a thorough-going co-educational country, like America, are well-known. Judge Lindsay's strictures on the evils of co-education are now known throughout the civilised world; and we, in India, recoil with feelings of disgust and horror from the disclosures made by the Judge on the basis of his actual experiences of cases before the Juvenile Court at Denver, U.S.A. Adjutant Emily Laird of the Maternity Home of the Salvation Army of New York City, said

about 4 years ago in an article in an American Journal of Physical Culture — 'Now a days 42 per cent of our unmarried mothers are school girls of the age group 13—17 years' Comment is needless Here, in a warm country, like India, puberty sets in at a much earlier stage and the sexual instinct develops sooner Moreover, our moral ideas and traditions militate against the introduction of co education in the adolescent stage

It may be urged from a standpoint of view of economy that boys and girls should be sent to one school as it would save much labour and cost But we must always bear in mind that education is a food for the mind, and just as we do not buy unhealthy food even though it is cheap, similarly we should not purchase cheap food for our mind if it is unwholesome for its growth Cheap education should always be avoided, and where cheapness would result in bringing along with it a hoard of evils in the shape of diseases of the mind, we should be careful to avoid it We do not generally like to take adulterated food though it is available at a cheap price, and when the question is a question of our inner self, should we kill ourselves by a supply of cheap but nasty food to our mind? What is good food for a boy's mind is not always good food for a girl's and by dealing out the same food to both, we shall cause them injury rather than good If a sufficient number of girls' schools and colleges cannot be had for want of funds we may give them education at home, waiting for better times for the growth of institutions for girls alone Education may wait, but we cannot bring into existence a sort of chaotic condition by placing the boys and girls under the same teacher, in the same room, subjected to the same discipline, with the same environment for giving their character a mould It is sometimes said that boys and girls have got to learn certain things from one another, and this can be achieved only if they are brought into closer communion by sending them to the same school It cannot be ignored that man has got to learn certain things from the fair sex, while woman has got to learn many other things from man, but this can very easily be achieved by their contact of every day life, consequent upon the various ties of relationship Within the family fold every member is a teacher and a student by turn at every moment of his existence Thus the mother is teaching the son, the brother is teaching the sister, wife the husband, and husband the wife Thus there is an interchange of thoughts and ideas with the result that man and woman easily and without any discordant elements stepping in, learn what is really necessary for them This is not possible when strangers from strange quarters meet together under the

common banner of a school where no one is ready to reveal his inner self to his neighbour. And thus one school-mate sees very little of his friend and can learn very little from him.

In conclusion, when we sum up what we have said we find ourselves still in the midst of enigma which we are called upon to solve. Herein we should measure our own strength first. We should put the question to ourselves and obtain a frank and definite reply. When we have got to face a problem that stares us in the face, we must at the very outset sincerely admit our defects and drawbacks, and approach the problem with all the frankness that we can command.

Now the question before us is whether we should send our boys and girls to the same school or college and whether the men teachers are fit teachers for our girls. Herein we should freely admit if we have any inherent weakness in us before sending our boys and girls to the same school or college. We should first make a thorough study of ourselves and say out openly and boldly if we have lived the lives of such purity in the midst of such environment that our children have been trained from their very cradle to respect manhood and womanhood in the spirit of brothers and sisters. If we cannot say "Yea" in reply, we must at once put a full stop to the practice. If we ourselves are not so trained as to look upon manhood and womanhood in that noble spirit, the free scope given to boys and girls for communion during school and college hours would lead to lamentable results. Glorious institutions in the east and west with the fervour of religion as their moving factors have been found to reach the darkest depths of degeneration, by giving free communion. If we are here to advocate Co-education, we must first create a healthy atmosphere where boys and girls may live together in the midst of idyllic simplicity. If that is not possible, we must abandon the idea. We cannot choose to work out the moral ruin of the future generation. Education is a very poor protection against temptation. If purity is not ingrained in us, merely by dint of education we cannot elevate ourselves to that serene atmosphere where men and women, boys and girls will do their parts, as it were, by dictates of nature. But is that possible? Can we think of such ideal society? Experience shows that men of high education, lofty position and noble birth have been found weak as a lamb before powerful temptation. Very often we are good men not by dint of any noticeable virtue in us, but by more chance, and we have to thank our stars that we had to face no ordeal. No one knows what would have been the position of the known good characters of a particular society if they were



confronted with the very temptations to which highly educated men of light and leading have been found to submit. Those who are God fearing and have faith in God, will devoutly say man has no strength of his own. All his powers are borrowed and flow from one fountain head. And his purity, if any, is also never independent. He is pure because his Maker out of His sheer mercy chooses to keep him pure. We may or may not agree with such views, but the stubborn fact remains that man even living a thoroughly disciplined life for long long years has proved himself weak before temptations. To day you may boast of your purity, your lofty standard of morality, but to morrow one may find flaw in your coat of mail.

Of all temptations the most powerful is the temptation of sex. If we make a survey of the known evils that are shaking the very foundation of human society, we would surely find that the evils arising from sex problems are the largest. Literature of every country records thousands of lamentable tales of human sorrows arising out of sex temptations. Human weakness is always admitted and we must not add fuel to the fire. In order to make our boys and girls better men and better women, we must keep them separate in their education. We should not allow them to receive lessons together at the cost of moral annihilation.

## ANNOUNCEMENTS

### I. EDUCATIONAL STRUCTURE AND ADMINISTRATION

National Education Association and American Association of School Administrators, Educational Policies Commission. *The Structure and Administration of Education in American Democracy*. Washington, D C : the Commission, 1938. 128 p. \$50.

Trends in structure and scope of the common school system, as well as certain relationships of local, state, and federal educational authorities constitute the subject matter of this new volume. As in its other publications, the Educational Policies Commission outlines policies for the guidance of school administrators and other educational authorities.

There is a marked tendency today to look upon the common school system as extending from the nursery school through the junior college. Traditional school organization is being modified to include nursery school, kindergarten, and the first six grades as a first unit; a four year program of continued general education as a second unit; and a final four-year program in which some differentiation according to vocational and other interests is begun. Units for administration and attendance should be large enough to ensure at least a desirable minimum of educational service at a reasonable unit cost.

Sound educational policy requires that all public educational opportunities be directed by local and state educational authorities. In local communities proper control of educational policy can only be exercised where fiscal and administrative independence from the general municipal authority is enjoyed. The state discharges a proper function without interfering with local initiative and responsibility, by indicating in broad outline a minimum program for the common schools, and by encouraging communities to exceed this minimum wherever possible. The state is obligated to provide such financial support to local school systems as will tend to guarantee a reasonable minimum of educational opportunity.

The growing economic and socio-cultural unity of this nation calls for increasing participation of the federal government in the financial support of public education in the several states. Such support should tend to equalize educational opportunity without involving control by the federal government.

The public schools of America are traditionally secular schools founded on the thesis that complete separation of church and state leaves all religious groups free to instruct children in beliefs which they hold sacred. Maintenance of the doctrine of separation of church and state is of surpassing importance in the determination of educational policy by local, state, and federal governments.

The book was prepared by the Educational Policies Commission in collaboration with Dr. George D. Strayer. Illustrations are by Edward Shenton. Attractively bound in cloth and boards this volume is the second of a series on "Education in American Democracy" begun in February 1937 with publication of *The Unique Function of Education in American Democracy*.

## II CAMPAIGNS PROJECTED IN PROHIBITION AREAS

Already in thousands of homes in the districts, conditions have changed to a remarkable extent. Domestic brawls have ceased, a sufficiency of food is available and the grip of the money lender is relaxed. This has happened within the short space of four months" writes the Collector of Salem in his report on the working of Prohibition in that district.

The Indian Tea Market Expansion Board have contributed in no small measure towards this transformation in the lives of the people in Salem for in order to popularise tea especially amongst a population to whom toddy is no longer available the Board launched a special campaign. In this prohibition area many thousands not hitherto in the habit of drinking tea have been induced to accept and drink this safe substitute from which they now derive all the healthy stimulation they need.

The campaign in Salem has, therefore proved invaluable to the public as well as to the authorities in the prohibition areas, in creating the improved conditions now prevailing there. That the Board's enterprise is appreciated can be shown from many instances.

A report just received from the Salem area states that the District Collector of Salem, Mr A F W Dixon after a visit to the converted toddy shops, expressed great satisfaction in the results achieved by tea propaganda amongst the former toddy addicts. "He spoke in eulogistic terms of the work and wished it every success."

The experiment of converting country liquor shops into model tea stalls, was extended to the prohibition areas of the C.P. and Berar towards the end of January. The Board's campaign in this province has also been marked by favourable official recognition, and full advantage is being taken of every opportunity to popularise tea in the prohibition area on the same lines as in Salem. During the first seven weeks of the campaign about 229 274 cups of tea were distributed to the public in those areas, mostly amongst erstwhile toddy addicts and 32 671 pre packets of tea were disposed of.

Spontaneous tributes to the good work started in this new province are forthcoming. Dr D D Sukhdan Assistant Medical Officer of Badnera—one of the prohibited towns in Berar—writes "Those who are addicted to alcoholic drinks can safely and harmlessly take tea in its place and thus avoid the bad effects which the former has upon the body."

The use of tea can save much money trouble and inconvenience in many families where toddy was formerly in use.

In relating the story of the conversion of a sweeper in Akot who used to spend more than 30 per cent of his income on toddy Mr W N Sharma an official of the Forest Department Government of the C.P. reports "When questioned by me as to how he was managing without any toddy he told me that he had now taken to tea." It transpired that the sweeper had been to the Akot converted toddy shop and found that tea was being offered as a substitute for toddy so he took to drinking it.

—'Indian Tea Bulletin'

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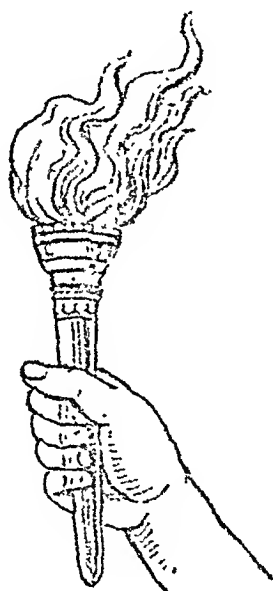
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VOL. III

No. 9

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR:  
D. P. KHATTRY



SEPTEMBER, 1938

ALL-INDIA FEDERATION OF  
EDUCATIONAL ASSOCIATIONS

POST-BOX 52, CAWNPORE

PRICE ANNAS EIGHT

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The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments, (d) articles containing statistics and their application to the solution of educational problems, (e) short notices of original works, (f) news of interest to educational workers.

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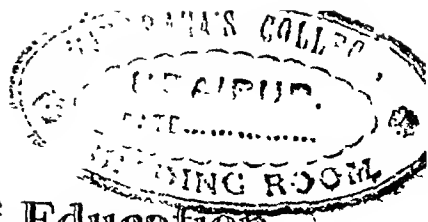
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THE RT HON'BLE SIR AKBAR HYDARI

I.C., D.C.L., LL.D.



# Indian Journal of Education

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Vol. III { SEPTEMBER 1938 { No. 9

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## THE EDUCATIONAL PROBLEMS OF AN INDIAN UNIVERSITY

BY

The Rt. Hon'ble Sir AKBAR HYDARI, P.C., D.C.L., LL.D.

*(Extracts from the Convocation Address of the  
University of Dacca, 1938.)*

Under the stress of modern conditions, we sometimes forget what is still the primal function of a university. In ancient days, in our own country as well as in the West, a university was a gathering-place of people, eager to learn and clustering round famous men who could teach them. This ancient ideal tended to be forgotten, both in the East and in some parts of the West, and a university was regarded merely 'as an examining body, conducting semi-inquisitorial functions. You in Dacca were the first among the modern Universities in India to strike out against such distortion. You realised that to discharge the duties which a university should fulfil, certain things were necessary. Students must live near their teachers; for this reason, Dacca became a residential university. In the next place, students must have access to their teachers; for this reason, Dacca has established the tutorial system. In the third place, learning must be both imparted and enhanced; for this reason, you founded a strong tradition of research and of original work. Finally, the university must be a focus of intellectual activity; for this reason, you devoted assiduous care and attention to the creation and maintenance of a magnificent library.

But we do not live for ourselves alone. We, Members of the Faculties, Graduates and Under-graduates of the University of Dacca, all owe certain duties to our motherland, not only as individual citizens but also as members of a great academic institution.

There is one problem, which alike in its gravity and in its national importance, claims our primary attention, I mean the

problem of the differences that appear to exist between the two principal communities of India. I for one refuse to believe, that those differences are not capable of a lasting solution, such as would, on the basis of a common nationalism and of national endeavour in the service of a common patrimony, lead to mutual respect and understanding. We are perhaps too religious minded a people to follow the more radical path of secularisation which countries like Turkey have adopted. Religion enters every detail of our daily life, but it does not follow necessarily that, in so entering, it should serve to take away from us the qualities of sympathy and toleration, which the teachings of every religion inculcate. That distinguished philosopher of our time, Mr Bertrand Russell, has pointed out that the strongest of our collective passions are group hatred and group rivalry, and whatever the cause or causes which lead to such hatred and rivalry between the two Indian communities—whether political, economic or cultural—the fact that such hatred and rivalry are based upon religion makes them the least appreciable and perhaps the most tragic of all. Yet here, in this University and in Universities like it, which have all the blessings of the atmosphere which surrounds a house of learning, we can learn and show to ourselves and to others the value of toleration and sympathy, and the baneful effects of hatred and jealousy. I know that you in Dacca have done much to learn these lessons and to exemplify them. This is but natural, for you have not only fostered Muslim education, you have advanced further in that you have also provided points of understanding between Hindus and Muslims.

In an age when the bitterness of rivalry has led even erstwhile protagonists of nationalism and unity—I speak of men of both communities—to profess disillusionment, and all the modern weapons of publicity and propaganda are being diverted from their true end, and are being employed for creating and expressing the unedifying passion of hatred, a spirit such as yours is widely needed, if we are to be true to our motherland and to ourselves. This country, which has given us birth, has not sprung from any one race, creed or culture, and the pages of its history are writ large with the contributions, not of any one community but of all the different communities, which it has nursed and who have given collectively of their best to make of it a beautiful land. We have received from our past a heritage of magnificence and splendour, and you have only to look at the grandeur and refinement, symbolised in the sculpture of Ellora and the frescoes of Ajanta, or in the beauty and grace enshrined

in the Taj Mahal, to derive lasting inspiration from the very fact of their co-existence. In our life and customs, speech and thought, we in fact accommodate the different cultures that gave birth to these monuments. Yet, is it not a tragedy that those very factors, which should inspire unity and assist the growth of a national consciousness, are to-day being used to emphasise separation? Urdu or Hindustani, for example, which by its very origin symbolises the effort of Hindus and Muslims to understand each other through the medium of a common tongue, is being to-day characterised as the language of a particular community and hair-splitting discussions are being attempted on the rival claims of different dialects. To the vocabularies of our language and of these dialects, unfamiliar words are being added from distant languages, in order to emphasise the differences rather than the similarities. Our common festivals too, which are occasions when the joys and sorrows of one community are shared by the others, are fast becoming occasions for communal clashes, while movements are on foot even to boycott these meeting-grounds of the two communities, where their two cultures mix and fuse.

You, however, in the community life which is so admirable a feature of your University, have opportunities, shared, alas, by too few other Indian students, of appreciating the strength of the ties which bind us all together as one people. Just as a wider outlook and a national consciousness will rid us of the trammels of obstructive parochialism or sectional claims, one way in which we can all assist, in creating a wide national front by way of outlook and effort, is to dissociate ourselves from sectional or "communal" activities; let us undertake, for example, never to belong to any institution that represents such purely sectional or communal endeavour. Another way lies—if I may use the term—in "decommunalising" our histories. Descazes had said of the needs of France during the Restoration: "Royalise the nation and nationalise royalty." Similarly, let us "decommunalise" our histories which urgently require such treatment. You will be glad to learn that the Education Department in Hyderabad has just produced the first of its history text-books for schools, based upon this principle, and is shortly to follow it up with similar text-books designed for other stages of the education of our younger generations. A third way, perhaps a more assiduous and leisurely but none the less an effective way, lies in the study of science or mysticism, the store-rooms, respectively, of logic and precision, spirituality and the inner meaning of religion. To the scientist and the mystic the whole

world or mankind is one, differences of faith to the one have but an objective significance, while to the other they denote absence of true spiritual perception

Yet another problem of gravity and importance is the problem of India's poverty. Incidentally, the giving of due importance to this problem and to the economic motif in several movements, which appear ostensibly to be communal, will not only serve to distinguish the economic from the purely communal conflicts, but also put in their proper places the communal and economic questions that face us. In examining these and kindred problems and their real importance, in relation to the life and well being of our people, our Universities and their research faculties can be the clearing houses of such examination, where experience and information can be pooled and sifted, and the adjustments necessary for our life as a nation on the path of progress can be formulated. That such adjustments are needed is apparent to any one, who looks at the different aspects of the life of India to day, particularly when the task of nation building has over a fairly wide field been entrusted now for the first time to Indian hands. Let us, therefore, start with a full realisation of the responsibilities that lie ahead and with unity among ourselves.

One of the adjustments we have to make among many others, in order that we may make our equipment in different fields accord with the life and requirements of our people, is the reconstruction of our education. On this subject about 13 years ago I made certain suggestions when I was privileged, in the same way as now, to deliver the Convocation Address of our sister University in the Punjab and from which, in view of the recent discussions, may I detain you with a few quotations? I then urged whether instead of having three different stages—Primary, Secondary and University—into which education is at present divided and in which the object of each stage is the preparation for the next higher stage, "*it is not possible to have three distinct classes of Education, each self contained, having a well defined goal and each especially adapted to the attainment of that goal*" Thus "*the first and most important stage of education, which I would prefer to call Essential education, ought to include all subjects which are of primary importance—subjects, the knowledge of which is useful to every citizen of the State, whatever trade, calling or profession he or she may choose to follow, as tending to increased efficiency or better citizenship*"

This course would, with suitable Readers, Syllabus, and School Libraries, include through the medium of the vernacular

most of the present Middle School course and even something of the present High School course . . . These "*Schools should not be merely literary—text-book reading schools—but should have a practical side—agriculture, gardening, cottage industries (if they are in the districts), arts and crafts (if they are in the city).* An experiment on these lines, which we are conducting in Hyderabad, shows how much greater progress the boy, who devotes a part of his time to learning the use of his hands for some trade, can make in the same time even in the ordinary curriculum laid down for the primary and secondary stages. On the completion of the essential course thus designed, the boy would either leave school altogether for the practice of agriculture or some trade, for which the primary education so organised might be regarded as his technical education, or he would enter" a High School . . . These Schools "*should each of them aim at giving a vocational training complete and adequate as far as it goes,*" and would include Schools of Engineering, Medicine, Law, Government Secretariat, Commerce, and Business with a less protracted and expensive course than the present, which would give the country and, especially the village side, Doctors, Engineers, Lawyers, Agriculturists and Businessmen, etc., expecting but a moderate remuneration . . .

"*The University would then take charge of students after they had emerged from these vocational High Schools weeding out such as proved themselves inadequate or undesirable,*" . . . which means that it would "*take charge of the direct instruction and training only of a limited number of selected students—limited by the ability of the students themselves to follow the University course, and limited also by the number required to satisfy the estimated needs of the country . . . What I may call the lower activities of the University would thus be simplified and abridged, allowing it more freedom to pursue its higher activities, by which I mean research and specialisation and also, the investigation, consideration and solution of the educational and cognate problems which from time to time arise in every civilised country, sometimes becoming as acute as its political problems, and which the calm impartial judgment of the learned, working in an atmosphere free from all suspicion of racial, communal, bureaucratic or political taint, can best solve.*"

Accompanied by a vocational bias from the earliest stages, these proposals, on which the educational system of Hyderabad is being reorganised, will eventually result in adapting our educational system to the needs of our people and thereby diminish the number of unemployed which is likely to increase, if edu-

cation remains, as it largely is to day, divorced from the realities of our economy. This does not, however, mean that any great limitations, except those of fitness and requirement, will be placed in the way of those, who wish to benefit by a study of the humanities or the liberal sciences which go so largely to the making of culture in a man. What it does prevent is the repetition of that tragic situation, by which multitudes of young men, wholly unfitted for a University career, are allowed—nay, forced—to enter the Universities in the hope of securing some quite subordinate clerical employment or other. From the walls of your University are bound to emerge those who will play in the future an active, indeed, a directing part in many branches of the educational structure, and the same holds true of the different Universities that to day function in India. It is largely your task, therefore, to do planning in education, so as to bring it as far as possible in consonance with your needs.

I have spoken already on the need to “decommunalise” our histories. I am only thinking aloud of course, but I venture in that process to make a further suggestion to you for what it may be worth. Many of you must no doubt have read and been interested to read of the suggestion made by Mr H G Wells regarding the necessity of a world encyclopædia to act as a compendium, constantly kept up to date, of knowledge in all its branches. Whether a scheme so ambitious as this will materialise in our own time I cannot say. But I am convinced that a project of this kind, if applied on a more modest scale to our own country, would be of real and lasting utility. Co-operation between the Universities of India might well result in the creation of an Indian Encyclopædia designed for the same purpose, though perhaps not executed on the same lines. A work such as this, where knowledge of all that pertains to India can be co-ordinated and made available for the general benefit, would not only lead to better and more exact information but also, I am sure, strengthen our own feelings of oneness as a people and our responsibility to our country and to each other.

One last word now to those of my young friends, whether Graduates or Under graduates of this University, who have still their lives before them to live. Perhaps at no epoch of our history had any generation of the youth of this country before it a greater task or greater chances of fulfilling that task than the present. That chance exists wherever you look, provided there is manhood to undertake it. May you, my young friends, realise the scope of work which is yours and the great future which you can make not only for yourselves but for our people as a whole.



## AN UNCULTIVATED FIELD

BY

THOMAS H. BRIGGS,

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In the world of true science not one man alone but scores experiment on a problem that is recognized as important. Science is not content with a single worker publishing a tentative finding and then turning to another problem. It retests, extends, and continues cooperative effort until results are found that warrant practical and effective use. Science not only discovers but it proves and presents its findings so conclusively that the workers in the field apply them for the benefit of mankind. Indeed it has trained the development engineer whose function is not original discovery, but rather the translation of the theoretical into practice.

Every student of education recognizes that a program of education must be based on carefully gathered facts and that improvement of its techniques should be directed by the results of experiments planned and carried out with the same meticulousness and persistence as in other fields. For several reasons the attempt to introduce science into education has fallen far short of the success that reasonably was expected of it.

In the first place, too few of those who have offered courses on research in education are master scientists. We have attempted for the most part to teach the techniques of statistics rather than the spirit of research. Statistics are a valuable instrument in research, but the underlying principles of scientific inquiry must be understood or they lead to mischievous results. There is the type of worker who, in the words of Andrew Lang, "uses statistics as a drunken man uses lampposts—for support rather than illumination."

Certain of our ablest statisticians have apparently assumed that refined figuring can compensate for crude and not truly representative data. As a matter of fact, most of the problems which arise out of educational practice are relatively gross and need only simple statistics to check the conclusions of common sense.

Research in other practical fields is closely related to practice, springing from its obstacles and returning to remove

them. In education it too frequently is remote in origin from school procedures and its conclusions have little effect on them. In other fields it is common to find a master concerned with some major problem and numerous students working under his direction on minor but contributing aspects of it. In education this is the exception. Even our abler research men skip about too much. Our students waste much time trying "to find a problem," without any expectation that the solution will contribute to a vital need or that they themselves will become outstandingly competent on some procedure of recognized importance.

The most common procedure in educational research is to collect facts. Much of this is good enough as fact collecting, but so many of the facts are collected without relation to a vital problem and consequently they are seldom used to prove a theory or to modify practice.

One explanation of the neglect of carefully guarded experimentation in education is the difficulty of arranging satisfactory conditions with human beings who must be safeguarded from harm. Yet the value of education and the human beings whom it is to affect demands that we risk the few for short periods of time that we may learn how to benefit the many by improved practice. That this can be done without serious harm is evidenced by the numerous so called "experiments" that are going on all over the country. But how few of them are set up as true experiments. Education needs to use the appropriate experimental procedures in order to solve the important problems that are obvious in general practice or that are raised by progressive theory.

Research in education should originate in appeals for help from men and women in the classroom and from administrators who still retain sufficient interest in human development to appreciate the difficulties that are actually encountered in education.

In the past two decades we have probably published more so called research studies and done less about them than any other professional group. One reason for this is the large amount of scattering of effort. Another is the fact that educators in the field do not know what conclusions are reliable. A contribution that is sorely needed is an evaluation and popular interpretation of all published studies in education. This would not only reveal to teachers and administrators what can be relied on but it would also indicate the areas in which further research is needed for the consolidation of knowledge.

Field workers have been taught neither to interpret the findings of research and to translate them into practical procedures nor to have a sense of responsibility for so doing. For every course in our colleges of education on how to carry on research there should be five on what to do with the findings that are published. Industry uses a development engineer, which education needs to use too. Imagine what might not be achieved if we had actually in our classrooms every day someone who is informed of what research has proved, who understands the theory back of it all, who knows children and the teacher, and who can direct the translation of what science has discovered into promising procedures, which he supervises until they are effective under conditions as they exist. While doing all this, the development engineer in education would discover and refer to the research agencies for solution a steady stream of problems that grow out of experience.

To make research and the scientific study of education more effective we need, then, the following:

1. A complete and continuous evaluation and interpretation by the most competent agency possible of all published research studies.

2. Concern by research workers with problems that are manifest in actual practice, that are made evident by proposals for new types of practice, or that are brought out by new proposals of philosophy of society and of education.

3. A division of research so that competent men concentrate on areas of specialization, in which there will be many subordinate but closely related and immediately contributing problems.

4. Persistence on problems studied until conclusions justifying changes in practice are reached.

5. Better training of the relatively small number of men and women especially gifted and genuinely interested in the spirit of research.

6. More critical evaluation of published studies.

7. More repetition of reported experiments with the same or with improved techniques for the purpose of testing the conclusions, a common practice in all fields other than education.

8. Research that will explain the theory underlying the observed achievements.

9 Research to extend reported studies, in whole or in part, or to apply basic theories that have been substantiated

10 Training of all workers in the interpretation of reported studies and in the translation of their findings into programs of practical procedure

11 The development in teachers and administrators of a sense of responsibility and a conscience to use the proved findings of research for the improvement of practice and to refer to research agencies for solution the problems that develop in the day's work of the classroom

Until we attempt these things we shall continue a pseudo science that is now neither vital nor effective

—*The Education Digest*

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## TEA IS GOOD FOR YOU IN MANY WAYS

### Because

"If you are cold, tea will warm you—if you are too heated, it will cool you—if you are depressed, it will cheer you—if you are excited, it will calm you

(Gladstone)

### Because

"Indian tea is undoubtedly the best and cheapest stimulating drink which is free from narcotic properties, and ought to receive popular favour which it rightly deserves"

(DR S DUTT, M A , P R S , D S c , D I C)

—*Indian Tea Market Expansion Board*

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# THE RESOURCES OF THE ENVIRONMENT AS MATERIALS OF INSTRUCTION\*

BY

DR. F. G. WILLIAMS,

*Ushagram.*

*Note.*—This article is the third of a series which constitute a study of the educational resources in the environment of rural children living in the area contiguous to Ushagram.

## Manufacture and Industry.

Industry, even though concentrated in urban centers, affects rural people and their living to no small extent. In the first place there is the migration of rural workers to urban industrial centers. The attraction is cash wages. The sons of the family often go away leaving their wives and children in the parental village home. The men make periodic visits to the village bringing news of the outside world. They send money to their families. This relieves the pressure on the ancestral parcel of land. In the second place, industry often goes to the rural people and gives to them employment during off the season when normally they would be idle. This is particularly true of the coal-mining area about Asansol in Western Bengal. The varied experiences of the villager, as he participates either actually or vicariously in industry, is a rich educational resource. It is not possible to develop here detailed descriptions of the various industries. A few may be mentioned and their outstanding contributions recorded.

The Ranigunj coal-field extending from Ondol to Barakar (a distance of 35 miles) is one of the oldest and most productive in India. Many of the mines are equipped with modern machinery, owned by large corporations and operated by European managers. Many others are worked by small operators, usually Indian, without electricity and with a minimum of machinery and safety equipment. A number of seams of coal have been located and several are being mined. The deepest seam being worked lies about 1800 feet below the surface. Much of the underground labor for this work comes from the aboriginal tribes (Santals). Low-caste Hindus (Bourics) also work in the mines. Until October 1937 women accompanied their husbands into the mines loading the coal which the men cut. However since that date women have not been allowed underground and are employed on the surface largely in loading operations. A significant contribution which the coal industry makes to rural life in this area, outside of the work

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\* The first two articles of the series published in July and August issues were also by Dr. F. G. Williams. We regret the omission of his name in these issues.

which it gives to the landless classes, is the fuel which it brings into the farm home. This diverts much of the cow manure (which would be otherwise used for fuel) to the fields for fertilizer. Each miner is allowed to take from the mine each day in addition to his wages, all the coal he can carry. This is more than he can use in his own household, and he sells the balance to the neighbours.

Closely connected with the coal industry is the manufacture of coke. Many of the smaller mines when unable to secure substantial orders from commercial firms and railways, confine their output to the production of coke for the local trade. The raw coal is carefully piled in stacks of from 50 to 500 tons, and burned into coke. It is then bagged and sold. The miner also burns his coal into coke. The women and girls of the family pile the coke high in baskets and carry it (on the head) about the villages and markets selling where and when they can.

A number of resources appear in these industries

- (1) In the actual excavation of coal and production of coke — Digging the shafts, Setting off dynamite blasts, Air circulation by fans. Danger of accumulated gas, Accidents — explosions, falls, etc. Use of safety lamps, Operation of mine lifts. Operation of cutting machines, Cutting coal with pick. Loading the tubs. Sandbagging and removing pillars. Loading of railway cars, Piling coal for coke burning. Firing and extinguishing coke stacks, Preparing for sale. Selling raw coal and coke.
- (2) In the uses of coal — For fuel in the home, For making coke, For burning lime, For burning brick, As a substitute for expensive wood in the funeral pyre, For generating steam power in factories, For generating steam in railway locomotives, For generating electricity.
- (3) In the people who work in the mines — The European manager and his bungalow. The labor contractor, The company barracks (dhouries) for miners, Company owned villages where miners have plots of land for cultivation. Miners who live on their own land, The women who work on the surface and babies left to their own devices while mothers work.

The manufacture of lime (ghuting) is found near urban centers and occupies the time of a large number of men hauling the "ghuting" from the deposits to the kilns and of others in the burning of the lime and its preparation for market. The "ghuting" is piled in small crudely built brick walled kilns and fired. The preparation of the burnt lime for sale is an important part of the proceedings and the unwary buyer will get more ash than lime. The lime is sold by the maund (80 lb) or by the cubic foot. It is of poor quality and can be used only for mortar in rough work.

Another important enterprise upon which the building operations of industry are dependent is brick making. Bricks are fired in two types of kilns. One is an excavation shaped like a horse-shoe. It

measures from 75 to 150 feet in length and is from 15 to 20 feet wide and 10 feet deep. The other type of kiln is that in which the bricks to be burnt are stacked in a pyramid above the ground. The first type of kiln produces the best brick, and is the method used by the professional brickmaker. The second plan is more likely to be adopted by the amateur or the man with little capital. Bricks are moulded by professional brickmakers who set up camp near the kiln for the duration of the season. All work is done by contract and they keep at it from sunrise till sunset. The bricks must be made during the dry season (between November and May) when rain is not likely to destroy them in the drying stacks. The brickmaker of Western Bengal uses no straw. He needs good clay, sand and plenty of water. After the bricks have dried, they are stacked and loaded with slack coal. The kiln is then sealed with cow dung and clay and fired. It takes about three weeks for the bricks to burn. Then the kiln is unloaded and the bricks are classified into first, second and third class. The price (according to the type of kiln used and the demand) ranges from Rs. 12 to Rs. 18 per 1000 for first class, from Rs. 8 to Rs. 12 for second class and Rs. 6 to Rs. 9 for third class. Resource materials here are plentiful:

- (1) Making the brick:—Testing for suitable clay; Puddling the clay; Cutting the clay; Moulding the brick; Open or closed box; Sanding the box; Sanding the brick; Stacking the brick to dry; Protecting the stacks from rain.
- (2) Burning the brick:—Preparing the kiln; Stacking the brick in the kiln; Loading the layers with coal; Placing the air shafts; Sealing the kiln; Firing the kiln; Attending the fires; Opening the kiln; Removing the brick.
- (3) Using the brick:—Classifying the brick; The sale of brick; The mason and his helper; Mixing mortar; Laying brick; Straight corners; Plumb-line; Lining wells; Ovens built by householders; Septic tanks; Floors; Repairing the temple; Ancient brick often uncovered.

The railway is both an industry and a means of transportation. As an industry, it hires a great volume of labor and a part of the wages it pays finds its way into rural homes. The railway has done much for rural people. It has made famines all but impossible. When there is a crop failure in one section of the country, food is quickly transported into that area from other sections. At the same time the train has become a menace to health in the ease with which carriers of disease spread their contagion over wide areas. The educational resources of the railway will be discussed under the next head.

### Transportation.

The rural child of Bengal is very fortunate in the rich variety of methods of transportation which he sees and experiences. The transportation experience of the rural child of the West has been impoverished by the advent of the cheap motor car. The buggy and the sleigh have all but vanished from the scene. In Bengal new means have arrived but not to the exclusion of the old. The coolie still carries his heavy load across the fields and along the roads. The farmer who

cannot own an ox cart carries his loads on his back or on his head. The itinerant vender has his coolie who carries the pack of articles for sale. Women usually carry their loads on the head while men carry loads on their backs or shoulders. Children up to ten years of age, when travelling long distances with their parents, are seen perched on the shoulders of the father. Children also learn to carry their share of the load at an early age.

Animals are used for transport. Every washerman has a family of donkeys, large and small, each of which is loaded high with clothes as they are conveyed to and from the pond or river. Often the itinerant vender has an undersized pony on which he rides astride the pack of articles. These ponies are so small (and often sway back from their heavy loads) that the vender's feet all but drag the ground. Occasionally a zemindar (landowner) owns an elephant and his tax gathering agent appears astride the monster to the delight of village children. The elephant's bell hung loosely on a rope around the neck, can be heard for half a mile as he swings along the road breaking small branches from the trees and munching the leaves.

The "palanquin" was originally and is still used for conveying Bengali ladies of caste who are kept in "purdah." Because of the advent of other more convenient means of transportation in the towns and cities, the palanquin is found only in isolated rural areas. It is a box like compartment attached to two long poles and carried on the shoulders of four porters. There is barely room for the person riding to sit erect. It is made of wood with doors which close tightly. Six or eight porters are required according to the weight of the person carried and the load is shifted to rested shoulders without a stride being lost. The "palanquin" is often used at times of weddings when the bride is being taken to the home of the groom. It is now seldom owned by a family, but must be hired along with the porters.

The bicycle has become very popular in recent years due to the greatly reduced prices of English and Continental cycles, and to the influx of cheap Japanese cycles. The Japanese cycle has been selling recently for Rs. 20 fully equipped. The cycle is the ideal means of transportation for the villager. Seldom are there roads worthy of the name but the cycle can be manoeuvred along the well worn footpaths which connect the villages with the main roads and the towns. The cycle has done much to lower the distance factor in rural areas. Police officers, doctors, inspectors of schools, surveyors and the omnipresent moneylender, all use this means of conveyance to penetrate the most isolated areas.

The ox-cart is still by far the most common means of transportation. It is slow but sure. It can go through rivers, across rice fields, and along narrow paths. It can turn on its own width and it seldom overturns because of its low center of gravity. In Bengal the carts have two wheels. The large transport carts have wheels up to five feet in diameter but the small village carts suited to the miniature village bred ox, has wheels of three foot diameter. Usually the wheels have iron tires. Often the axle is of wood but the stronger carts which are used for heavy transport have iron axles. On the axle the frame of the cart is built and this frame is attached to a long, solid piece of



wood (the tongue) on the end of which is the yoke. It requires good judgment and careful loading to get the cargo of rice or passengers perfectly adjusted so that it is balanced on the axle. If imperfectly balanced, the load will be too heavy on the necks of the oxen, or the cart will capsize to the rear. The driver squats on the cart tongue between the flanks of the oxen where he can pinch and twist the tails. The driver misses most of the hard jolts which those sitting over the springless axle get. Often the carts have a bamboo frame and cloth canopy reminding one of the prairie schooners. The carts which make up caravans are always equipped for protection against weather. Much of the freight in India is still conveyed by ox-cart caravans which move along the main roads. Some caravans travel by day and stop at night under spreading banyan trees, while others travel at night when the road is clear of motor traffic. Along some of the narrow mountain roads in Sikkim (North Bengal) motor traffic is forbidden at night and caravans have the right of way. In the hot weather caravans usually travel at night and rest in the day. Often the drivers are fast asleep on top of the load.

Conveyances sometimes seen in the villages especially near large towns are the rickshaw, tonga, ekka and tikka gharry. The rickshaw is often owned by a zemindar for the transportation of his small children to school. It is exactly similar to the type found in the port cities of Calcutta and Madras, and originally came from China. The tonga is a two-wheeled cart drawn by one horse or two oxen, with a body made especially for the conveyance of passengers. Two seats back to back carry three or five persons and the driver. The ekka is a cart drawn by a pony. The passengers sit on benches with their feet dangling over the wheels. It is common in North India. The tikka gharry is found near large towns or at railway stations or at the kacherry (court). It is a rickety, light-wheeled, spring carriage built very similar to the palanquin box except on a grander scale, with cushioned seats for four people. Its doors can be entirely closed so that it is much used by purdah ladies. It is drawn by two ponies. The driver sits in front, high on the box, and guides with reins and lashes with a whip.

The motor bus (passenger) and the motor lorry (freight) have made their appearance on highways and are competing effectively with the railway. Regular schedules are seldom maintained. The bus usually leaves when it has a pay load of passengers. It will stop at any point along the route to receive or drop passengers, or for any other reason (example: helping a motorist who is in trouble). The buses seemingly never wear out but are traded or sold to cheaper routes and continue their groaning and knocking over rougher roads to the unconcern of the chauffeur and passengers alike. The fare on the buses is approximately that of the cheapest class on the train except for short runs when it exceeds the railfare. However, since the railway stations are usually located far from the village, and the bus route runs through the village, people find the bus more convenient. Sometimes the seat behind the driver is reserved for purdah ladies and curtained off.

The railway is the most important means of travel between distant points, and offers cheap transportation to the villager. Accommodation on the train is by class and one pays accordingly. In the first class compartment the passenger has upholstered furniture, fans, private bath

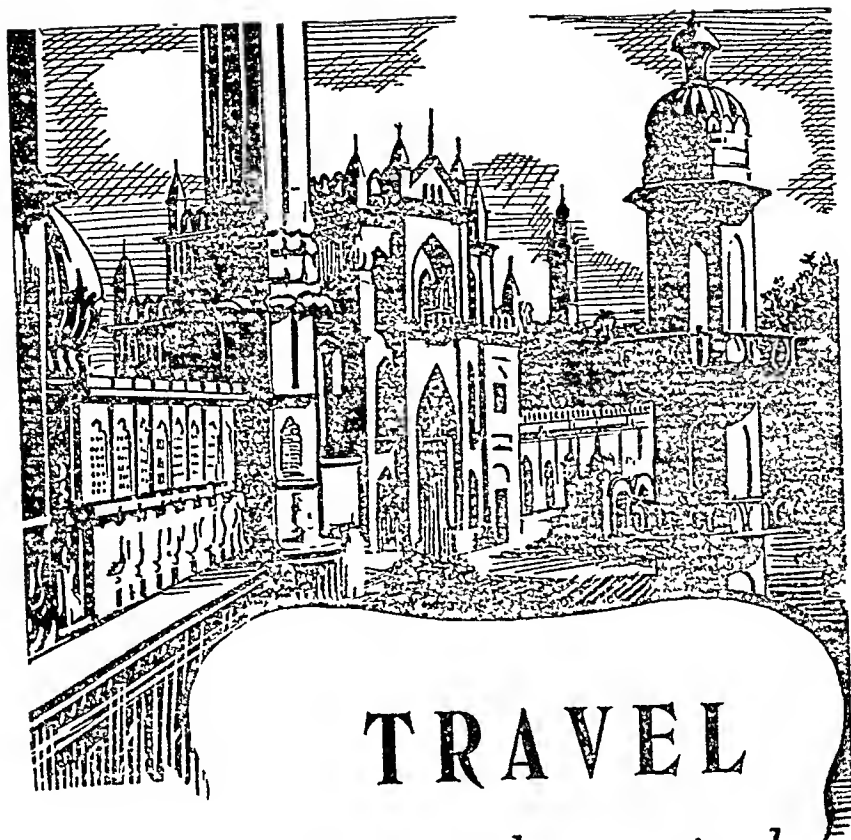
and exclusiveness. For this he pays eight times the amount paid by the third class passenger who travels in a compartment usually crowded, with accommodation consisting of hard wooden benches, a dim electric light and an ill kept toilet. The third class passenger pays slightly more than  $\frac{1}{2}$  anna per mile. All train service is kept strictly to schedule. The villager travels third class with his belongings tied in a cloth or rug. He may add a tin suitcase to his luggage. He is allowed 30 lb of luggage free above which he has to pay according to the distance he travels. He buys his ticket, shows it from time to time to inspectors who travel on the train, and finally gives it up to the gate keeper at the station where he leaves the train. He may carry a few "chapatis" (bread cakes) with him, but food is provided at every station by vendors, and drinking water ("for Hindus only" and "for Mohammedans only") is always available.

River transportation is important in Lower and Eastern Bengal but in Western Bengal is limited to the Hooghly and the Ganges rivers. Neither the Damodar nor the Ajoy is navigable. However, in the monsoon season these rivers are wide and swift and can be crossed only by ferry. The ferries ply at stations a few miles apart, and villagers pay a small fee for transportation. Ox carts and motor cars are also transported on the ferries. Small boats are almost non-existent along these rivers.

Although few villagers have experienced a ride in an airplane many of them have seen the machines flying over their villages. The three air mail routes connecting Europe with the Far East (Imperial Airways, Air France and K.L.M.) pass over Western Bengal on their way to and from Calcutta. The emergency landing field near Asansol often plays host to a light plane to the great delight of thousands of villagers who visit the air port to get a close view of the air monster. Occasionally an air circus visits the air port and offers short rides for Rs. 5. Even this small amount makes the experience impossible for the cultivator.

The resources may be divided into Travel and Transportation.

- (1) Travel experiences—Walking to nearby villages, Ox cart trips to town and markets, Tikka gharry connections at Court. Riding bicycle to school or work, Ferry boat crossings, Bus trips to distant markets, Ascertaining nearest bus stop, timings, etc., Train trips of pilgrimage, festival, etc., Nearest station, buying tickets, weighing luggage, etc., Meeting travellers, Seeing new and different places, Care and repair of owned conveyances.
- (2) Transportation experiences—Carrying rice from fields, manure to fields, Carrying coal for sale, Watching ox cart caravans, Freight into the village in carts or lorries, Sending parcels to distant places—(a) From post office by parcel post, (b) From station by train, (c) By bus or lorry, (d) By ox cart—Seeing loaded lorries, trains, airplanes, Loading railway wagons (coal).



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## A PROGRAM OF UNIVERSAL SECONDARY EDUCATION

BY

HARL R DOUGLASS,

*University of Minnesota*

That democracy has operated so awkwardly is of course largely attributable to the incompetence and ignorance of the sovereign people. With the increased complexity of modern life the need for education has been augmented. The depression has brought into sharp relief the perils inherent in a democracy whose citizens are not educated in proportion to the needs of the issues. A large proportion of the population has been stampeded into distinctly dangerous campaigns for unsound plans for social justice, wealth sharing, old age pensions, and state control of productive enterprises, while the jingoists and witch burners have labeled patriotic citizens of high social ideals "Reds," "Communists" and "Radicals." The threat to prosperity and security that lies in a democracy without adequate *universal education* can be seen without unusual powers of insight.

It seems almost providential that along with the increase in complexity of our problems have come conditions which make it possible to offer increased educational opportunities. The same technological advances which have given rise to many of our problems, and complicated others, also have multiplied national income.

*Can all youth profit by schooling?* It is idle to think in terms of a fixed secondary school program to which all pupils must be adapted. *If it is desirable to give further education, the school must be adjusted to the enlarged constituency.* That a more flexible program of secondary education has not already been developed in no way weakens the position that universal secondary education is necessary. It merely raises questions concerning the basic educational philosophy of teachers and administrators, and illustrates the futility of leaving entirely to teachers with their meagre and narrow technical training fundamental issues affecting the general welfare.

It is doubtful if there is any considerable proportion of individuals not able to learn. The problem is partly one of firing their enthusiasm and partly one of developing suitable learning materials. Learners not only vary in general capacity but also in the ability to learn certain types of things. Failures in one field often become successes in another.

There are those who approach the question of the extension of secondary education from the angle of the rights of children to these advantages. *The most important consideration, however, is not the right of the individual to free education but the necessity for a democratic society to provide it and insist on it.*

It is true that many young people now in the high schools because they have no other place to go do not make serious efforts to avail themselves of the educational advantages open to them, and it has been suspected that the use of public funds to provide unwanted educational opportunities is not justified by the results. But the problem is not quite so simple as it was when employment was available to all who did not wish to go to school or those the school did not wish to retain. Until the doubtful time when vocational life can absorb the 3,000,000 unemployed between the ages of 16 and 20, some provision must be made for them. The question really is: Should the problem be thrown on the existing public schools, or should a new type of institution be developed to care for the new pupil constituency? Either new schools or new curricula must be established.

In the past, unfortunately, education was thought of as something for children only. And two other fallacies have underlain our educational practice. The first, which may be called the "storage" concept, is that sufficient knowledge and training may be acquired in childhood to meet the needs of the rest of life. When confronted with the known facts about forgetting, which quickly wipes out most factual accumulations, the adherents to this concept take refuge in the myths of mental discipline as a means of justifying the *status quo* in secondary education.

Closely associated with this impractical concept is our "all or none" policy, which makes no provision for the *gradual* shifting of the adolescent from the school world of books and blackboard to the adult of ballots, bread-earning, and home-making. Today, the child is not permitted to participate, except very incidentally, in the responsibilities of work, home, and government, until he has finished his formal schooling. Then he is expected to shift suddenly, on full time, to the workaday world.

It is extremely doubtful if this arrangement can be justified. The value of much that is taught in school depends on the degree to which the learner is able to correlate it in application to the outside world. Lacking in experience of that world, he never realizes much of the potential value of his training. Pupils forget much of their school "education" before they have acquired sufficient acquaintance with its relations to life to enable them to assimilate it. Learning and life, if the former is to be of real value, must be thoroughly interrelated.

It would seem then that a truly sound program of education for at least half our youth would involve participation in both school and vocational activities in approximately equal proportions after the age of 16 or thereabouts. Today the average youth is leaving school at the age of 16, but the trend is toward full-time attendance until 18. That this trend should continue is debatable. It is not even certain that we can develop a full-time program that would interest the type of boy or girl who does not now continue in school beyond the age of 16. *Better than universal full-time attendance until age 18, and perhaps less expensive, would be half-time attendance until 20 or 21.*

If youths beyond the age of 16 are afforded the opportunity of earning their own expenses while they continue their education on half-

time, the hardships imposed on parents by compulsory legislation will be largely eliminated. And if these young people can be kept in contact with the school for their first years of participation in adult life, guidance services of inestimable value in matters of occupation, home-making, health, recreation, etc., may be developed.

—*The Education Digest*

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### THEY SAY

The Marquis of Zetland, Secretary of State for India, writes:

*"Of the many industries now grown to adult stature, whose beginnings are to be found in the enterprise of last century, there are few which have given such substantial and such widespread benefit to us all as the tea planting industry. To me it is of particular interest, since India is one of the three great tea producing countries. The tea industry is the parent of the Province of Assam and has fostered the development of other areas, formerly unproductive. Something over a million people find their living by the cultivation and manufacture of tea in various parts of India, in rural conditions congenial to the family life which appeals so strongly to the Indian people."*

—*Tea News and Views*

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## SELF-SUPPORTING EDUCATION

BY

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The self-supporting aspect of the Wardha Educational Scheme has aroused a keen interest and even keener criticism in educational and political circles. There is a good deal of confusion about its original implications, subsequent developments, improvements, reservations and provisos under which it has been recognised in its final form by Dr. Zakir Husain Committee.

The ideal of making education self-supporting was first declared by Gandhiji in his contributions to the *Harijan* in order to make up the expected fall in excise revenue on account of the Prohibition policy of the Congress Governments. It was to be the acid test of the reality of an educational system.

Although convinced of his conclusions on which he had arrived after considerable thought and age-long experience of practical education, he brought forward his proposals in a tentative manner before the Wardha Conference keeping his mind open all the time for further changes in the scheme. The Conference passed a carefully worded and highly judicious resolution on the Scheme: "They EXPECT that this system of education will be GRADUALLY able to cover the remuneration of the teacher." The resolution was generally approved by the educationists and the Press and it was instrumental in disarming the suspicions of some of the worst critics of Gandhiji's proposals on educational reform.

The recommendations of Dr. Zakir Husain Committee are a distinct landmark that have cleared all the issues in connection with this particular aspect of the Scheme. In the first instance they have declared in the most explicit and uncompromising terms that the ideal of the New School will be educational. This viewpoint is to control and regulate educational practice, the training of teachers, supervision and administration of the system of education. The value of the Scheme according to them is to be found in its educational possibilities. "Even if it is not self-supporting in any sense, it should be accepted as a matter of sound educational policy and as an urgent measure of

national reconstruction. The economic aspect of the Scheme is a side issue, a by product of the educational process. In their words, "It is fortunate however that this good education will also incidentally cover the major portion of its running expenses." Finally they have sounded a note of warning for the teachers and the supervising staff and drawn their pointed attention to the obvious danger, that the economic aspect may be stressed at the expense of the cultural and educational objectives, and that the teachers may devote their time and energy to extracting the maximum amount of labour from children while neglecting the intellectual, moral and social implications and possibilities of craft education.

The above provisions are sufficient guarantee against all suspicion of exploitation of child labour or degenerating the children into mere hack workers or machine hands.

The scheme has been assailed from several quarters. Firstly there are persons who raise their rather over-sensitive nose at anything savouring of economics or productive activity in the field of education. Such a system smacks of low sordid motives of profiteering and is wholly undesirable even if it be feasible. They cannot for all the world conceive useful labour with education or production with schools. Most of them probably belong to the bourgeois class, the higher society who, mostly belonging to parasite professions or vested interests which grow fat over the labour of other classes and thus can hardly contemplate with equanimity a scheme of education that will compel every prospective citizen to learn the dignity of labour by working with his own hands.

The tragedy of our educational policy is that no serious attempt has been made during the British period to correlate school and society after a carefully conducted survey of the ideals and needs of the community. In our indigenous system of schools we cling tenaciously to the past while in administration, the State departments of education have been accused more than once, not unfairly to have adopted, this year, measures that were removed from the Code of the Board of Education, England, last year.

In our distinction between liberal and vocational education and making one the means to an end which is implied in the other, we are consciously or unconsciously labouring under prejudices borrowed from the caste system and our preconceptions from the educational philosophy of the West which is inspired by the Greek thought in Plato's Republic or Aristotle's Ethics. In both these cases education was to subserve the cause



of a leisured class, which has a subject race under the heels of oppression, to serve as a means to the self-directing class of the population. The peculiar psychological theory of Plato or the legend of the origin of the castes from Brahma were theories to justify and establish on a rational basis a certain social order.

But are we justified in foisting such old world ideals on a community with an altogether different socio-economic order, based on free citizenship and democratic principles and with confirmed views on the dignity of labour? The Wardha Report is an educational protest against untouchability when it expects the high-class Brahmin to work shoulder to shoulder with the Pariah for contributing his share of social service to the community. There are others who declare that ours is a machine age and production through manual labour has no chance of competing with countries where industry has been thoroughly mechanised. They recommend socialisation of the resources and industrialisation of the means of production. But can that be a reason to neglect the indigenous crafts and cottage industries and should education mark time and await such a happy consummation? I am afraid Gandhiji is also not very convincing on this point because he does not base his conclusions on any logical reasoning but acts by faith and conviction. He holds that modern industry turns man into an automaton, a part of a soul-killing system that beats out all originality and creative urge in him, that starves out all morality and yearning to lead a life rich with high ideals. In his opinion, industrialisation through handicrafts will go a long way in eradicating some of the worst evils of the present social insecurity and poisoned relations between classes. And all this would be accomplished without the horrors of a bloody class war or a colossal capital expenditure such as would be involved in the mechanisation of a vast continent like India. Nor would it entail a helpless dependence on foreign imported machinery or technical skill. Besides, he firmly believes that countryside cannot be thoroughly mechanised or industrialised.

We may not agree with his economic principles and hold firmly in the opposite that the salvation of the country lies in mechanised industry. Even then it will take some time to reach such a stage of industrialisation. Japan took more than half a century to revolutionise her industrial system and we with our political, economic and social limitations may need a larger span of years. Meanwhile should we rest on our oars and see the indigenous crafts and our children going to dogs? To some, an attempt to revive the indigenous crafts is synonymous with

lapsing into feudalism and the dark ages. Nothing is further from reality. We know the high traditions of Indian industry during the Mughals and even earlier that attracted the whole world trade and made India a center of land and sea routes that led to all parts of the globe. We know that the skills and aptitudes which once gained for us such an enviable position in the industrial world are still there waiting for sympathy and congenial atmosphere to burst forth in their fullest energy. We know how highly the Indian textile work was prized even as recently as the occasion of the Empire Exhibition held in Crystal Palace in 1850. And should not we try to preserve these noble traditions of arts and crafts by training our children in those ideals which will be the sure guarantee of the conservation and transmission of its skill and knowledge to future generation. Wardha Scheme is a unique experiment in this direction for utilising schools for reviving indigenous crafts and arts. The educational world cannot show a prouder example of this principle than in the working of the system of rural schools in Mexico, which have been specially opened to revive old Aztec crafts under the overlooming shadow of the economic competition of such a highly industrialised neighbour as the U.S.A. Of course the experiment has been a splendid success and has received glowing tributes from educationists of the highest eminence like John Dewey and Kandel. And surely there is no danger of Mexico plunging back into the feudal stage.

Apart from this, a training in the handicrafts will be an excellent preparation for the industrialisation stage. The skills and aptitudes, the habits of observation, judgement and resourcefulness, the coordination of physical and mental capacities as developed by the craft education, will stand in good stead, to the humble worker of the cottage industry, or the operative of a power driven industry. All the industrialised countries have passed through a state of transition. The cottage industry of spinning furnished yarn for the first textile factory of England and even to day under the highly industrialised system of a country like Japan, there is a useful place for cottage industries, often subsidiary to a central factory or the by product of industrial process, working with or without the help of steam or electric power. The writer saw an excellent example of this cooperation of hand power and steam power at the Rural Institute of Sriniketan where hand spun yarn supplied by hundreds of poor widows of the neighbouring villages was being used in the power driven shuttles of the Weaving Section of the Institute. The day is not very far when some of the proposed Schemes of Hydro

electric supply may bring electric power within easy reach of the rural school and within the means of the villager, and under such an exigency the New School with its deeply practical atmosphere and craft training may go a long way in accelerating industrialisation. Dr. Zakir Husain's Committee Report does not commit itself to any economic theory or any social order. Its aim is to educate and train a set of workers who have developed an intelligent outlook of life and a healthy attitude towards work. They will have the strength of character and flexibility of adaptation to stand the test of changing times and circumstances.

Then there is a section for which the Scheme comes as a genuine surprise. They have never heard of a self-supporting system. Its very novelty and originality takes away their breath and leaves them in suspense. These good people cannot conceive of any system that is not subsidised and perhaps controlled as well by the State. Their ideal is the West where they can spend lavishly on education and have enough to spare for armaments and schemes for aggrandisement because of their ill-gotten wealth through capitalistic exploitation and Imperialistic profiteering. Or perhaps they have memories of the glorious past of India when state, identical in interest to the people spent generously on education and this vision seems to blur a clear perception of the realities of the present situation, the political servitude and, more than that, our economic dependence.

If we look for example and inspiration for the reform of our educational system, our models should not be England or America but less fortunate countries that are trying to solve their problems of constructive work in the field of education under difficulties more or less similar to India or which have struggled against them in the past and have worked their way out of it into success and prosperity by giving a new orientation to their educational system.

Pestalozzi's well-known attempt at a self-supporting school has been mentioned more than once in this connection. His inspiring personality led several other persons to launch such schemes for the amelioration and emancipation of the Swiss peasant who was as much worse off in those days as the Indian ryot. Fellenberg, a member of aristocracy and a convert to the methods and ideals of Pestalozzi, started an educational venture at Howl on the self-supporting basis where the poor were trained for poverty. The Institution sprang into phenomenal renown under Wehrli, a poor of the poorest, who had been trained by the stern mistress, adversity, into learning the craft of spinning by which he was able, with some difficulty to keep the wolf from the

door The Garden Schools of Germany supply practical education to poor parents and their children who work on plots allotted to whole families, each family receiving the produce of the plot The Cultural Committee of Labour Federation of Palestine has planned such schools for the Jews where work would be the basic principle of education and social regeneration

Nearer home we meet with splendid results in schools and institutions like the Rural Community School at Moga and the Manual Training Institute at Dornakal At Moga the pupils are paid for their work in the school garden or some craft and out of their earnings and profits from the marketing of the commodities, they have to pay land, water and tool rent, the cost of fertiliser and seeds, school fees and living expenses, the school being a residential Institution At Dornakal, the Founder has clearly laid down that "no boy or girl should be admitted to the Institute who was not willing to contribute towards his or her support either by money or labour" Besides the industries some students perform domestic duties like linen washing, cleaning the premises, collecting firewood and drawing water, and their earnings are credited to their school accounts These Indian institutions, which have received the highest tributes from most competent authorities, are essentially based on the self supporting system The Moga experiment is considered on all hands the most constructive experiment in the field of Indian education

Both these institutions are conspicuous in setting their pupils to a vocation, handicrafts, agriculture or gardening from the earliest stage which does not seem to have a detrimental effect on their cultural outlook or their successful career for the out of school life To the objection that there is a fear of the economic element being too much stressed at the expense of the cultural and spiritual in the Moga Experiment, Dr Kilpatrick gives a reply in the following words "At this some will be troubled lest the cultural and other higher spiritual aspects of life are to be overlooked Possibly it will suffice to suggest that culture and spirit are not best conceived as separate from the rest of life but as inherent in the whole of life Let Indian children begin their cultural life in actual connection with existent Indian culture"

Dr Zakir Husain's Report is most explicit on the statement of the objective of the craft education which is such a reasonable skill in the handicraft chosen that the pupil may be able to pursue it after finishing the whole course In the final test that will continue for two months, the pupil must attain an earning

capacity of Rs. 12 per month in case of spinning and weaving. Practical experience in the Dornakal school seems to point out exactly the same line of action, there being the necessity of making the pupil to stick to one particular craft in order to gain some efficiency at it. Of course the selection is made at quite an early stage.

We find an early vocational bias in the Children's villages established by the Jewish community in Palestine. There are three such children's Republics where an eight hours' day is observed including school subjects, agriculture and domestic work and the work assigned varies with the different age-groups in which the children have been divided. It is an educational venture which is running an estate. The children's village of Ben Schemen between Tel-Aviv and Jerusalem contains 300 children who are divided in three age-groups: 3 to 8; 9 to 13; 14 to 17. And one of the main causes of these attempts at introducing the vocational education from the very beginning is that the Jews' education had been hitherto of an academic nature and they had lost their contact with land and craftsmanship ever since they became wanderers on the face of earth.

# INTELLIGENCE AND ITS MEASUREMENT\*

BY

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## I DEFINITIONS AND NATURE OF INTELLIGENCE

What the psychologist understands by 'intelligence' is not much different from what commonsense uses it to mean. The layman differentiates individuals on the basis of wisdom, sagacity, comprehension, wit or intelligence. So does the psychologist. But while the former uses these terms interchangeably and in the same sense the psychologist in his pursuit for scientific accuracy and precision seeks to fix the domain of each one. Commonsense understands by intelligence some sort of efficiency or excellence the possession of which distinguishes a certain person from others. Psychologists also agree in treating intelligence as a capacity or ability whose presence in an individual in a certain degree enables him to outwit others in a certain performance. But the psychologist is not content with this. He therefore starts an investigation regarding the precise nature of this ability or capacity and formulates, as a result, a host of theories and definitions. In order to form our conception of intelligence we are required to examine the different theories and definitions of intelligence.

### Theories of Intelligence

The theories of intelligence have been classified under four heads: the Monarchic, the Oligarchic, the Anarchic, and the Eclectic. The Monarchic doctrine holds that intelligence is the sovereign power which pervades all intellectual processes. A person gifted with a high order of intelligence possesses, according to this doctrine, an all round efficiency in all kinds of performances. Cases of versatile geniuses have been cited in defence of this view. Conversely the unfortunate with whom nature has been niggardly in the bestowal of intelligence, is a dunce in all spheres of intellectual operations. Typical cases of feeble mindedness are quoted. In recent times Victoria Hazlitt has been a great exponent of this doctrine. She holds that there is a single general innate factor determining the order of efficiency in all special performances. An individual's efficiency, therefore, in a particular line, e.g., music, depends on the amount of the general factor and his training in that line. Besides this general factor and a slanting in a certain direction, there is no special aptitude, for example, for music.<sup>1</sup> But this theory does not stand the crucial test, for we come across some great geniuses who were surprisingly low in certain functions remote

\* The first of a series of three articles

<sup>1</sup> Victoria Hazlitt *Ability*

from their special line in spite of a systematic training in those directions. On the other hand, we notice persons showing a high talent for a certain kind of operation in spite of the absence of any training and the lack of opportunities favouring the unfoldment and growth of it.

The Oligarchic doctrine declares that there are several ruling powers or tendencies which comprise intelligence. Thus Binet, of whom we will know more in connection with the measurement of intelligence, treated intelligence as a bundle of 'unrelated and discrete abilities.' This theory is an echo of the traditional faculty psychology and consequently describes intellectual abilities in terms of a limited number of independent units, e.g., imagination, attention, memory, judgment, invention, etc. But actual experiments with mental tests knock the bottom out of this theory as well: for the different elements reveal such a close interdependence that any presumption in favour of their discreteness and unrelatedness is altogether banished. Thus an individual scoring high on a test of imagination, for example, is found to show a correspondingly high score on a test, say, of judgment. Such a relationship cannot be possible unless there be some sort of kinship between these two units. Again, the so-called discrete units, like the atoms of chemistry, cannot preserve their indivisibility much longer and are liable to a further breaking up into still smaller units. For example, memory for symbols and memory for ideas do not seem to derive from a common source: as efficiency in one does not necessarily involve efficiency in the other; rather sometimes the two operations show an inverse relationship. Same with the other units.

The defects of the Oligarchic doctrine supplied the foundation for the Anarchic. According to this theory there are unlimited numbers of independent elements whose aggregation gives rise to the different intellectual aptitudes. The greatest exponent of this view is R. L. Thorndike, who in his earlier writings treated the mind as a "host of highly particularised and independent faculties."<sup>2</sup> Thorndike, therefore, regards intelligence, revealed through a certain performance, as no definite ability or factor showing itself, but merely as an average of several independent traits. Thus according to this view there is neither a single sovereign power underlying all operations, nor a limited number of autonomous units each holding its own within its domain, but a vast multitude of agents and operators each following its own behest. An extreme form of this doctrine is found in the writings of Volkman, who, as quoted by Spearman, "roundly declared that every idea possesses its own memory, its own imagination, and so forth."<sup>3</sup> Now, as the different aptitudes are aggregates of diverse elements, their interrelationship, as indicated by test results, is due to the presence in them of certain common units, and not to any essential inner relation between them. Thus, as Garnett shows, "any number of total magnitudes howsoever correlated with each other can always be expressed as functions of elements that are themselves uncorrelated."<sup>4</sup> A test, therefore, does not measure any definite ability but only indicates the "average," "general level" or "sample" of a person's abilities. But,

<sup>2</sup> R. L. Thorndike, *Educational Psychology*, 1903

<sup>3</sup> C. Spearman, *Abilities of Man*

<sup>4</sup> *Brit. J. Psych.*, 1920

can this statistical average ever be regarded as truly representative of the person's real abilities? This question has been raised by Prof Spearman according to whom the anarchic doctrine does not seem to answer it. Unless the sample supplying the average is known to be the sample of a definite population its value amounts to nothing. For example, as Spearman puts it, "it would be absurd to pretend to give the average rainfall for Burma without having first said whether it referred to Lower Burma (which has about 200 inches) or to Upper Burma (which has only about 40). But then analogously idle must be any averaging of a person's 'intelligence' unless there has first been some settlement as to whether motor ability, sensory perception, memory, imagination, etc., are to be counted in or not."

The Eclectic doctrine or the Two Factor theory of Spearman, reduces all cognitive abilities to two primal factors, one which is common to all abilities and the other which is peculiar to the ability concerned. Thus according to Spearman there is a 'general factor,' which is the common reservoir of mental energy and numerous 'special' factors which make up the 'specific mental engines.' The general factor Spearman designates as 'g' which is identical with what is commonly understood by 'intelligence,' though Spearman forbears from using the word because of the ambiguity attached to it. The special factors he designates by the letter 's'. 'g' is not a concrete thing but a value or magnitude. Thus a person's measurement on a battery of tests can be analysed into his amount of 'g', which determines his performance in more or less degree in all the different tests and the amount of 's's' which are specific to each one. Individuals differ from each other in the magnitude of 'g' as well as of the 's's'. Though 'g' commonly underlies all intellectual abilities, its amount in them varies. Consequently, abilities differ in the relative influence of 'g' and 's'. Thus Spearman has shown that the ratio of 'g' and 's' in the case of classics is 15 to 1 while for musical ability the ratio is 1 to 1, in other words the classical ability comprises about 90 p.c. of 'g' and 6 p.c. of 's', and the musical ability 25 p.c. of 'g' and 75 p.c. of 's'.

Spearman arrived at the concept of the general factor from the fact of the mutual correlation amongst cognitive abilities. Before proceeding further, we should know what is meant by 'correlation' or the 'coefficient of correlation'. The correlation coefficient is a statistical device for measuring the presence or absence of correspondence between two variables. For example if we examine a group of, say, twelve year boys, in arithmetical reasoning and then in essay writing and find that the order of boys in one test resembles that in the other e.g., if boy R ranks first in both examinations, boy A second in both, boy Y third in both and so on the result yielded by the two types of examination will be termed to be positively correlated with each other. A case of negative correlation or inverse relationship can be found in the fluctuation of prices consequent on the variation in supply of commodities,—as the supply increases the demand decreases and vice versa. The correlation thus, may be either positive or negative according as the variation in the two orders is in the same or in opposite directions. The coefficients of correlation vary between  $\pm 1$ , which



indicates perfect relationship—either positive or negative—, and 0 which indicates total absence of relation, e.g., between the height of individuals and their ability to memorise. All intermediate degrees of correlation are indicated by the decimal values below  $\pm 1$  and above 0.

As stated above, the tests intended to measure intellectual abilities show a positive correlation among their results. Spearman argues from this that there must be a common general factor underlying all these abilities to account for their intercorrelation. In other words, if the order of all boys in one mental test conforms to the order of the same boys in another, there is sufficient evidence to show that the same capacity underlies the two performances.

Besides the evidence of intercorrelation, Spearman adduces a convincing mathematical proof of his Two Factor theory. He shows that if any four tests are correlated with each other in the manner stated below, the cross-products of their coefficients are approximately equal :—

	Analogy.	Logical Selection.
Best Answers	... .701	.560
Completion	... .625	.484

Here  $(.701 \times .484) - (.560 \times .625) = .010$ . The same equation may be symbolically represented by the formula :—

$$\begin{array}{cc} (r & r) - (r & r) = 0 \\ ab \times cd & ad \times bc \end{array}$$

where 'r' symbolises the coefficient of correlation and a, b, c, d any four mental tests. The four different types of intelligence tests used in the above equation are: (1) Analogy,—detecting the right type of analogy holding among certain given fundamentals; (2) Completion,—supplying a missing word in a sentence; (3) Best Answer,—selecting the most suitable answer to a question; and (4) Logical Selection,—finding the inseparable attributes of a substantive. The first line of the above table shows the correlation between Best Answer and Analogy (.701), and between Best Answer and Logical Selection (.560); the second line indicates the correlation between Completion and Analogy (.625), and between Completion and Logical Selection (.484). The above formula has been named by Spearman as the Tetrad Equation and the value on the left side the Tetrad Difference or T. D. The Tetrad Difference in the above equation is very small, being only .010. The departure from zero in an obtained tetrad is due to the fact that the tetrad is constructed out of coefficient of correlations obtained from measuring a limited number of individuals belonging to a class treated as representative of the total class. But some discrepancy between the correlation found from such a mere sample and that truly holding for the entire class is naturally expected to arise. For this very reason this difference has been called the Probable Error Of Sampling. This error can be reduced by widening the size of the group tested; but an easier statistical device has been formulated.<sup>6</sup> The error of sampling for a host of coefficients of correlation can be computed and then used as the criterion for judging whether or not the obtained tetrad differences depart from

<sup>6</sup> C. Spearman, *The Abilities of Man*, Appendix.

the true theoretical value that is zero to an extent which is natural for the size of the group. This is done by comparing the tetrad differences with the theoretical probable error to see that the largest tetrad difference does not exceed more than five times the probable error. The above tetrad equation is obtained from an application of the writers Hindustani Group Tests Of Intelligence to 50 school boys of 12 years age. The probable error in this case is 0.15, the T.D. being thus less than the probable error.

To conclude, the departure from zero of any obtained tetrad difference is not to be considered as a proof against the truth of the Two Factor theory, as Spearman says "In order to verify the law of Two factors, actual experiment should not satisfy the equation exactly, but instead should present exactly the right departure from it".

By mathematical reasoning Spearman has been able to prove that since measurements of different cognitive abilities satisfy the tetrad equation, each of these abilities must be saturated with a general factor which is common to all of them and is therefore responsible for the positive correlation, and a special factor which is confined to a particular ability. Spearman thus formulates the principle that abilities which are divisible into two factors, one general and the other specific, must satisfy the tetrad equation and conversely, that abilities which satisfy the tetrad must be divisible into two factors.

The Eclectic doctrine, though receiving the widest acceptance, is not altogether free from criticisms. Godfrey Thomson, admitting the truth of the tetrad equation, suggests that the fact that abilities satisfy the tetrad equation does not necessitate their division into two factors, for another and a different explanation can be offered. There may be multiple group factors—and no universal unitary factor—each of which is common to a limited number of different intellectual abilities. The group factors then, and not the general factor is responsible for the tetrad equation.<sup>8</sup> Similarly Kelley, though expressing general agreement with the findings of Spearman, claims to have established four independent group factors which he terms verbal number, memory, spatial and speed factors.<sup>9</sup> Again, according to Thurstone "since all mental tests are positively correlated it is possible to describe the inter-correlations in terms of several factors in such a manner that one of the factors will be conspicuous in comparison with the others".<sup>10</sup> Thurstone concludes on the basis of complicated mathematical deductions that abilities as measured by tests arrange themselves in "clusters" or "constellations". One of these constellations he discovers to exhibit the general factor of verbal ability, still another the factor of visual form perception and so on. Another criticism has come from Pearson who maintains that the experimental evidence for the Two Factor theory is based on too few cases and embraces too few abilities.<sup>11</sup> An attempt to

\* Ibid

<sup>8</sup> Brown and Thomson *The Essentials of Mental Measurement*

<sup>9</sup> Kelley *Crossroad in the Mind of Man*

<sup>10</sup> *The Vectors of Mind Psych Rev* 1934

<sup>11</sup> Pearson K. and Moul M., *The Mathematics of Intelligence, Biometrika*

meet these objections has been made by Brown and Stephenson.<sup>12</sup> Being guided by the discovery that verbal tests do not, while non-verbal tests do, agree with the tetrad criterion, because of the influence of reproduction and retentivity in the verbal tests,<sup>13</sup> they selected 11 primarily perceptual tests which satisfied the Two Factor theory and 5 non-verbal tests. To these they added 6 verbal tests from which the verbal group factor was partialled out,<sup>14</sup> leaving the intercorrelations amongst them attributable to the 'g' factor. They applied these tests to three hundred boys on the same day and computed the tetrad differences and the probable errors. The calculation shows a perfect correspondence between the actual distribution of tetrad differences and the theoretical distribution based on the assumption that the single general factor 'g' is the sole cause of the correlation, a "good correspondence of observation with theory," as the authors remark. The results of this elaborate research, which Spearman describes as a "landmark in the whole history of the topic,"<sup>15</sup> have supplied a great confirmation to the truth of the Two Factor theory. Thus, in spite of the conflicting views quoted above, the evidence in favour of a general factor underlying all cognitive abilities is sufficiently conclusive. Spearman agrees with Thurstone and others that there may be overlapping group factors—such as memory, logical ability, musical ability, mechanical ability, social ability, arithmetical ability, oscillation in mental efficiency—but claims that such factors are few and insignificant as compared with the general factor.<sup>16</sup>

The findings of Spearman receive their corroboration from researches in neurology. Lashley, as a result of his experiments on the ability of rats to retain maze habits before and after an injury to the cerebrum, remarks that "the experiments lend support to the theory which conceives intelligence as a general capacity." The experiments reveal "the existence of some dynamic function of the cortex which is not differentiated in respect to single capacities, but is generally effective for a number to which identical neural elements cannot be ascribed."<sup>17</sup> Thus Lashley ascribes a dynamic function, of the nature of Spearman's 'g', to the cerebral cortex, which does not belong to any differentiated structure, but is a relational property of the different parts of the nervous system.

### Nature of Intelligence.

Coming to the nature of intelligence, we find intelligence defined by psychologists in diverse ways. All of them agree that intelligence

12 Brown, W., and Stephenson, W., "A Test of the Theory of Two Factors," *Br. J. Psych.*, 1933.

13 Stephenson, W., "Tetrad Differences for Verbal Subtests Relative to Non-verbal Sub-tests," *J. Educ. Psych.*, 1931.

14 C. Spearman, *Abilities of Man*, Appendix.

15 *Br. J. Educ. Psych.*, 1933.

16 C. Spearman, "The Theory of 'Two Factors' and of 'Sampling,'" *Br. J. Educ. Psych.*, 1931.

17 Lashley, K. S., *Brain Mechanisms and Intelligence*.

is some sort of innate intellectual ability independent of the effect of experience and training. But there is much divergence as regards the precise nature of this ability. Thus Terman defines intelligence as "the ability to think abstractly" and holds that "an individual is intelligent in proportion as he is able to carry on abstract thinking"<sup>18</sup>. But Terman's definition seems to be inadequate in view of the fact that though an intelligent person is more at home with abstract problems, this does not preclude him from showing a similar adeptness in dealing with concrete situations. Others define intelligence on the basis of the biological conception of adaptation. Thus W. Stern defines intelligence "as the ability to adjust oneself to new situations". Similarly, Wells treats intelligence "as the property of so recombining our behaviour pattern as to act better in novel situations," and Burt regards intelligence "as the power of readjustment to relatively novel situations by organising new psychological combinations". But these definitions give us only a partial view of intelligence as they do not deal with the nature of intelligence but with its employment. Some psychologists have defined intelligence as the ability to learn or profit from experience. But thus, like all others quoted above, which merely indicate how intelligence involves this or that intellectual function, does not say anything regarding the precise nature of intelligence in virtue of which intelligence could be discriminated from other mental functions. Quite obviously intelligence is different from learning or profiting from experience, the two can never be identified. Learning depends upon intelligence, but not on that alone. It involves other functions as well e.g. retentivity and reproduction which are equally important for learning, though their correlation with 'g' is very low. Another definition is given by Victoria Hazlitt who regards intelligence "as a problem solving organisation" or "a confluence of experiences configuring the solution of a problem"<sup>19</sup>. But this definition also merely gives a description of intelligence rather than indicate its nature. Thorndike defines intelligence as the capacity for "mere association or connection forming"<sup>20</sup>. He arrived at this conception on the conclusion of an experiment carried on by him on the relation between the intellectual abilities and the associative abilities. He reports a positive correlation of .94 between the factors common to the two sets of abilities and concludes that as mere association and the higher abilities have in the main the same cause, the essential element in intelligence is the capacity for mere association. But the tests which Thorndike included among the 'purely associative' were as pointed out by Rex Knight, not really that, as they included arithmetic tests, vocabulary tests, and tests of general knowledge all of which depend more or less on the same intellectual functions on which the tests of higher abilities were based. Thus "what Thorndike revealed was, not a correlation between intelligence and mere association, but a correlation between two manifestations of intelligence"<sup>21</sup>. Again, "If Thorndike were right and intelligence were the capacity for mere association, then many mental defectives whose

<sup>18</sup> Terman L. M. *J. Educ. Psych.*, Vol. xii

<sup>19</sup> *Op. cit.*

<sup>20</sup> Thorndike E. L. *The Measurement of Intelligence*

<sup>21</sup> Rex Knight *Intelligence and Intelligence Tests*

association are often numerous, would have average or superior intelligence."<sup>22</sup> Thurstone, who treats mental life as "consisting primarily in the approximate formulation of the motives leading towards overt expression," regards intelligence as the "capacity to make impulses focal at their early unfinished stage of formation."<sup>23</sup> An intelligent person, according to Thurstone, is one who can delay his impulses from issuing forth in the final specific form of overt conduct by holding them before consciousness in their general and undefined aspect, and thus select from among the different forms, which the specification may assume, that which is most suited to satisfy the impulse. But mere focalisation of an impulse cannot be treated as the work of intelligence. An individual may be able to focalise his impulses before allowing them the final discharge, and still the resulting action may not be intelligent.

Spearman defines intelligence in terms of three abilities<sup>24</sup>: (1) The ability to observe what goes on in one's mind or the power of self-introspection. (2) The ability to discover essential relations between mental fundamentals. "When a person has in mind any two or more ideas, whether perceived or thought of, he has more or less power to bring to mind any relations that essentially hold between them."<sup>25</sup> (3) The ability to educe a mental correlate to a mental fundament where a relation is known. Spearman calls these three principles, comprising intelligence, the Neogenetic Principles. The three abilities may be ultimately reduced to two, *viz.*, the eduction of relation and the eduction of correlates; as Spearman himself suggests "the two non-experimental principles, most conspicuously deserve the name of intelligence."<sup>26</sup> The principles can be illustrated with the help of an item from a sub-test of intelligence:

Carpenter: furniture::cook: . . . . . ?

Here first there is an apprehension of the meaning suggested to one's mind by the fundamentals 'carpenter' and 'furniture.' Next there is a discovery of the specific relation holding between the two, *viz.*, that of cause and effect. On the discovery of this relation, there is, thirdly, the discovery of the absent correlate 'food' which is related to 'cook' as 'furniture' is to 'carpenter.' Intelligent solution of problems arising both in abstract and concrete situations, can be explained on the basis of this principle of eduction of relation and eduction of correlates. All great discoveries and inventions have taken place as a result of the discovery of new relationship between some old fundamentals. The discovery of the planet Neptune is a good illustration of this principle. The planet Uranus showed particular changes in its rate and direction of movement for which no adequate explanation could be given. Various facts were known about the planet but none could offer a solution. The search was for a relationship which could integrate these

<sup>22</sup> *Ibid.*

<sup>23</sup> Thurstone, L. L., *The Nature of Intelligence*.

<sup>24</sup> C. Spearman, *The Nature of Intelligence and the Principles of Cognition*.

<sup>25</sup> C. Spearman, *The Abilities of Man*

<sup>26</sup> C. Spearman, *The Nature of Intelligence and The Principles of Cognition*.

facts. The moment the relationship came to be discovered, there issued, as a consequent, the discovery of a new fundement, the planet Neptune hitherto altogether unknown.

Wyatt, though agreeing with Spearman's definition of intelligence in its essentials, points an inconsistency in Spearman's account of 'g' as made up of three abilities. The statistical evidences prove that 'g' is the common 'unitary' factor underlying all intellectual abilities. Now, then, can it be split up into three abilities each admitting of individual differences in it? "The statistics point to one single factor, the analysis to three." Wyatt resolves this conflict by showing that the analysis is only logical. Psychologically all the three, i.e., comprehension of experience, eduction of relation, and eduction of correlates, derive from a fundamental power, the ability to cognize relation. For, comprehension or consciousness of experience itself means cognizing relations between the different items of experience, as consciousness cannot be possible without contrast. And, the eduction of correlates can be no separate process from the eduction of relation, for the cognition of the relation determines and necessitates the cognition of the correlates, "the appearance of the correlative experience is its necessary outcome." "What correlates will emerge depends upon what relation is held in consciousness." "The decisive factor," thus, according to Wyatt, "is clearly awareness of the relation. The fundement involves no special intelligence. And the appearance of correlate is contingent upon the relation having been apprehended."<sup>27</sup>

Spearman's principle of eduction also like his Two Factor theory, receives its support from the findings of Lashley. Considering the neural mechanism of relation finding, Lashley remarks "There is no evidence to support the belief in the identity of nervous elements. On the contrary it is doubtful if the same neurons or synapses are involved in two similar reactions to the same stimulus. The unit of neural organisation is not the reflex arc or the system of reciprocal innervation but is a mechanism by which reaction to a ratio is produced."

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<sup>27</sup> Wyatt H. G. *Psychology of Intelligence and Will*

## IF I WOULD HOLD YOU

BY

FERNE PARSONS NORRIS.

I know I cannot hold you long, My Own!

My part is but to nurture, and make strong  
Your brave young wings, that you may fly alone.

It is God's way, 'tis natural, not wrong.  
I must not seek to live again in you,  
Or make you live according to my plan;  
To do the things I've done, or wished to do,—  
A mother's inmost urge since time began!

I must guard always not to have in mind  
My selfish satisfaction, lest you pay  
With wasted years; nor ever let me blind  
Your eyes with mother-love, to get my way  
Above all else, ah, Child of Mine, I know,  
If I would hold you, I must let you go!

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## VALUES

BY

ELSIE HACHENBERGER.

When visitors are shy and small  
I never use the words "Don't touch"  
Toward things not valuable or brittle,  
Through fear my living room or hall  
Perchance be disarranged a little.  
Values to me are ever such  
That friendship of a child means more  
Than ordered shelves and tidy floor.

—*National Parent Teacher.*

# CURRENT EVENTS AND THE TEACHING OF CIVICS

BY

E M WHITE, F R Hist S,

*Hon'y Secretary, Gould Society*

Knowledge of Current Events is indispensable in Civics Teaching, for citizenship is an active aspect of life, and it is impossible to act with permanent effect without knowledge. The institutions that have been formed are important, but for the citizen there must be added changes for the future, as that cannot be bound by the past, though it is necessarily founded on it. The motto chosen by the new Borough of Wembley, *Tempori Parendum* (We must adjust ourselves to the times) is the right civic outlook.

But a board covered with cuttings and pictures from news papers does not constitute a survey of the present day world. Without the right explanations it only confuses or misrepresents. The newspapers themselves give prominence to the things of impermanence, and ignore those of real current interest, in the sense that a river is current, having a far away source, and continuing until it reaches its objective. It is the slow moving but current tendencies, such as that towards self government for India, that make history, and they must be duly emphasised in the education of the young citizen. When viewed *sub specie aeternitatis*, even the tragedy in Spain is of less importance than the gradual spread of education in the last half century.

Bearing in mind that current means more than yesterday and to day, though the term includes them, the teacher should explain and discuss the events and tendencies, with settled principles always underlying his thought, even if not always expressed. These principles may be summarised thus —

1 Goodwill must be felt towards all countries, and this arises only if the common humanity of all is realised. "The same heart beats in every human breast," said Matthew Arnold, and it is puerile to look upon any nation as wicked. To understand should be the aim, not to judge. This cannot be done if "sides" are taken in the affairs of other countries, and young people will feel a diffidence in doing this the greater their knowledge. Ignorance rushes in where knowledge fears to tread.



2. There must be goodwill towards and appreciation of all the Faiths. It is old-fashioned and ignorant to speak about heathen and pagan people nowadays, with a Buddhist Mission and Muslim Society in England. Some description of the legends, principles, and practice of the religion of the country involved should be given. No understanding of Indian troubles can be obtained without some knowledge of Hinduism, and of Islam, with its strong racial feeling. In speaking to young people about other faiths it is best to introduce them by legends and stories.\*

3. There must be a historical basis, without which the present is incomprehensible. What do they know of Italy, Germany, Russia, Spain, Japan, who only consider present-day events? The history must go back, not years, but centuries, for events follow events in continuous movement; and in one sense there is nothing sudden in history. What seem like flaring upheavals have been smouldering for ages. The French Revolution was more than 200 years in preparation; and to explain Italian Fascism the history of the Roman Empire and the medieval Roman Catholic Church must be used.

Geography and psychology must also serve: the several divisions in Spain came naturally through the mountainous country; the Nazi movement in Germany would be impossible with people not amenable to discipline or not methodical in their habits.

Economic causes are always at work, sometimes far hidden, but nowadays much in evidence, since machinery and electricity have so enormously increased production. The life of the common people calls for understanding: the condition of the peasants in Russia made possible the Russian Revolution and subsequent events.

4. In attempting to evaluate policies let us remember that the people are more important than commercial undertakings—a principle which was not adhered to in the formation of the British Empire, therefore allowing what would not now be tolerated. Such bans on the conduct of nations are themselves a sign of progress.

5. When any country is discussed its artistic or cultural values should be indicated, that is, its contributions to poetry,

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\* An excellent type of books for this purpose is *Cradle Tales of Hinduism* by Margaret Noble.

painting, music, architecture, etc., as well as its scientific achievement. These are of more value than its wars and dynasties, and give a more true impression of its people.

6 The League of Nations must be dealt with, and shown to be a young institution—not yet 20 years old. It is better to dwell on its achievements rather than its so-called failures. The civic student must regard it as a beginning, and not judge it in the carping tone of those who think such a vast undertaking can be perfected even in a century. It should be pointed out that not until all countries participate, and a less schoolmastery attitude is adopted, can much progress occur.

The treatment of current events in the manner suggested is more difficult and entails more study and thought than merely recounting newspaper items, but it is the only way in which to educate young citizens towards a right attitude to the striving world of which they are a part, and in which they should play an effective rôle. The helplessness and confusion that arises when only what is now happening is considered, are obviated on the presentation of a long vista of so-called crises and recoveries, and it is seen that civilisation proceeds, without rest and without haste, through the unceasing labours of Humanity as a whole.

—*The Woman Teacher*

## THE STUBBORN LOGIC OF YOUTH

BY

MISS AMINA MINHAJ, B.A.

However illogical the wayward fancies of children may appear to the less receptive mind of the adult, the child's imagination is in fact governed by a stubborn sense of logic, whose premises are invariably stimulated by the eye.

Ellen Terry tells in her 'Memoirs' of her efforts to persuade her small son to learn by heart a poem by Black the last line of which ended 'And all the hills are covered by sheep.' All went well until the last line was reached. And there the small boy most firmly struck. 'All covered with' grass, trees, snow, stones—yes, everything but the poet's sheep. Nothing could induce him to add that tiresome word, even when tearfully prompted by his mother and sister. Hills, he knew well enough, were nearly always covered with grass, often with trees, and sometimes with snow—but as for sheep covering hills, it was patently absurd.

To a child, seeing is believing. It is in the deductions from their visually-stimulated beliefs that children achieve their most delightfully wayward fancies.

### Brain, Eye and Ear.

It is this fact which is the principle of modern methods of education. Educationists everywhere have become aware that the brain must be stimulated by co-operation with eye and ear. Old systems which crammed the brains with an indigestible and undigested mass of facts are rightly discredited. The methods demanding that children should live only to learn, have been discarded for the more sensible order that they must learn so that they may live—in the widest sense of the word.

There is, of course, little novelty in educational methods which lay stress on this co-operation between mind and ear, between mind and eye.

Even to savage races and to mankind living in the dawn of intelligence, some traditions, some elementary knowledge, some stories of ancestors, were handed down from generation to generation. As the group of tribe grew stronger, so more detailed and more necessary did oral instruction become. But

later on legend and story alone were not enough to ensure that knowledge was acquired and understood. Thus man turned to the only alternative medium—the eye, and primitive drawings worked with primitive instruments resulted.

Slowly then, were evolved symbols for speech. Words too should achieve some measure of imperishability, and thus were alphabets constructed.

It is well to remember that modern methods of using diagrams or pictures to convey and stimulate a thought, are only a development of the primitive realisation that drawing was an apter means of passing on instruction than words alone.

### **Bulk of Knowledge.**

If primitive man had need of these methods, then how much more are they needed to day! Progress in every art and science has created an alarming bulk of facts, which must, in one person or another, be passed on to subsequent generations. The tendency of specialisation to day is but one result of the incredible multiplication of scientific knowledge in recent years.

How then may all this knowledge be most easily absorbed, and so presented that it may be developed in the future? Here is the educationist's most urgent problem. His object is to stimulate the mind directly by such means as handicraft, rhythm, in sound and movement, by training the eye to observe and ultimately to co-ordinate observation by reason. For the ear there are lectures, radio talks, gramophone records—all of which help the teacher in his task. But the eye until recently, has only partly fulfilled its purpose. Pictures, diagrams and photography have not kept pace adequately with other educational developments.

It is surprising that the most accessible of all forms of instructions is also the most neglected. The cinema, whose whole development has taken place within the lifetime of most of to day's teachers, is an instrument of education which is the logical successor to the drawings of primitive man. Its language is universal, its appeal direct, easily assimilated and above all, stimulating.

### **Facile Stimulation.**

The commercial film has appealed largely to the mediocre intelligence because of its facile stimulation of the tired mind through the eye. It is this facility of stimulation which forms

the educationist's chief argument for the wider use of the instructional film.

Its possibilities are immense, and its scope without limit. The film can re-create history, give reality to columns of statistics, illustrate a meaningless formula, explain the mysteries of Nature, and can people the map with nations. Properly used, the film is the most powerful weapon that has ever been put into the hands of the instructor. The diagram has been given life, and the picture endowed with the reality of movement. Seeing is believing. To this phrase the film has given a wider meaning. It provides the answer to the small boy who refuses to be convinced that the poet's hills were covered with sheep, and in answering him solves the teacher's most difficult problem: that of giving his pupils a mental conception of the facts on which his future learning is to be based.

## PARENTS PLAY THE LEADING RÔLES

BY

GERTRUDE LAWS, Ph D

Excellence in our social order will grow out of excellence in individuals constituting that order, and of improved relationships among them. Most of our defects are acquired after we are born. Social and emotional defects, which affect relationships to other people, may be acquired early in life. Children acquire habits of work, play, rest, relaxation, sleep, diet and elimination long before they enter school. Such habits bear directly upon their relations to others. They learn to cooperate with adults and each other, to understand directions, to adjust happily to the rights of others, to make orderly associations before they enter school. The habits and learnings acquired before a child enters school go far to determine the quality of his school experience. So significant indeed is the "education" which takes place outside of school that it sometimes seems that we give least attention to the most important factors in education.

The word "education" to many people means buildings, administrators and teachers, books comprising a system legally imposed upon children, and remote from the parents. The group which thinks of education in this way includes both teachers and parents. There has been recently a gradual extension of school responsibility. We have assumed that more school attendance would assure better education. Compulsory attendance laws have been enacted and attendance officers with a kind of police power have been installed. Regulations are made which govern activities of teachers and children, without participation of teachers themselves, or the parents of the children.

The observable outcomes of this kind of thinking about education are indifference or resentment on the part of parents, and servility on the part of teachers. These attitudes become a part of the education of children.

Fortunately, however, the number of people who think of education in this way is diminishing. There are many people to whom "education" means an individual experience, which begins at school age and ends with completion of school requirements. A person who thinks in this way speaks of "giving a child an education," or of "having an education." Specific

skills with reading, spelling, writing and numbers; specific knowledge of particular facts are demanded at given ages as the outward and visible signs that a child is "getting an education."

In certain communities the schools are attempting to modify their practices in a way that will provide for the individual needs of pupils more adequately than this concept of education affords. Self-appointed individuals and groups, who think that education means that every child, at a given age, should possess specific factual knowledge and specific skills, have created disturbance by demanding school arrangements with which they are familiar. While this way of thinking about education is somewhat more enlightened than the more mechanical way indicated above, it is far from the kind of thinking which will bring about a general recognition of the dignity of parents' participation in education. The way we think about education tends to modify what we do with respect to it.

The skill of parents in cooperating with their duly elected boards and other adults is one of the ways in which they may contribute to social skill in their children. Attempts on the part of any individual or limited group to dominate public school policies and procedures is contrary to the best interests of all the children of all the people. Parent participation in formation of public school plans and purposes is important and greatly needed, but it will have to be developed gradually, as both parents and teachers see clearly the implications of education as a continuous process which begins at birth and continues throughout life.

Parents may participate in the education of children in different ways. Perhaps the most important of these ways is in sheer being. The physiological vitality of both parents determines the quality of equipment for education which each child brings into the world with him: it continues to affect their dealings with each other and with the child after he is born. The offspring of parents who are intelligent, kind, generous and who have a variety of interests in addition to a fine physiological vitality comes into an atmosphere favorable to desirable education. Parents cannot escape a degree of participation in the education of each child, though they may attempt to do so by employing a nurse, or a tutor, or by sending the child away to school. What the parent is as a person will be a factor which affects his child's education for better or for worse, throughout the life of the child.

In one sense parents have direct participation in the phases of education which take place at school; not by doing children's home work for them, but by careful selection of boards of educa-

tion and by supporting their duly elected officers in their efforts to conduct public schools effectively

Parents participate in the education of children by providing protection for them against experiences which are too stimulating, or too complex for their years, and at the same time providing for as much freedom of choice and action as a child is mature enough to use without harm to himself or others

Most parents want to participate in the education of their children wisely and well. The mistakes that are made are seldom deliberate, they are rarely due to lack of affection. They are due rather to ignorance of the nature and needs of the child, and of his relationships. During recent years much has been found out about human relationships by workers in research centers. Careful study of such findings is serving to make parent participation in education more satisfactory both to parents and children.

As parents of children in public schools become articulate about educational philosophy, they too will participate directly in curriculum reconstruction. Both school practices and home practices will be modified as the meaning of education as a process becomes apparent to parents and teachers.

Under favorable conditions for each individual, education brings about a feeling of well being as surely as other life processes,—under favorable conditions—generate a feeling of well being. The defects of our social order can never be removed by passing laws, however good, nor by more severe punishments of offenders. They can be removed, however, by preventing the acquisition of defects by individuals constituting our social order. Enough has been found out to go far toward providing conditions in which individual children learn social responsibility and acquire habits and attitudes which control their conduct. It is important that parents and teachers shall know and use what has been found out. Such knowledge cannot fail to improve the quality of the *workable participation of parents* in the education not only of their children, but of other adults.

—National Parent Teacher



## REVIEWS

*Emotion And The Educative Process.* By Daniel Alfred Prescott, Ed.D., Published by The American Council on Education, Washington. Price \$ 1.50.

This book is the report of the Committee on "The Relation of Emotion to the Education Process" of the American Council on Education. It is the outcome of four years of assiduous research work on Emotion and its bearing on education. It explores the relationship of non-intellectual factors and the aims, methods, material, and personnel involved in education. Strictly speaking, this is not only a study of emotions in the narrow sense. It is rather a study of all 'affective experiences' or 'affective factors' which play a part in the educative process.

The objectives of the study, as set forth in the original statement of the Committee, were to ascertain "the recognition to be accorded to emotional factors in the educational process, with special reference to the questions: (1) whether emotion has been unduly ignored in the stress laid upon the acquisition of knowledge and the development of skill in the acquisition of knowledge; (2) whether education should concern itself with strength and direction of desires developed or inherited by the educational process; (3) whether the stress laid on the attitude of neutral detachment, desirable in the scientific observer, has been unduly extended into other spheres of life to the impoverishment of the life of American youth; and (4) in the event that it should appear desirable for education to concern itself more directly with the development and direction of education, to consider by what devices emotion may be more accurately described, measured, and oriented."

The volume under review discusses the various definitions of feeling and emotion and distinguishes three levels of emotional behaviour in terms of level of stock, *e.g.*, (1) mild emotions, (2) strong emotions, and (3) disintegrative emotions. Mild emotions have a tonic effect; conditions producing strong emotions have the nature of crises; disintegrative emotions are the grave cases of physical and mental pathology, caused by emotions of overpowering strength or of unsupportable duration.

Emotionally conditioned attitudes occupy a very important place in determining the personality and character of a person,

Their functions have been summed up in the book as given below — (1) They supply the code or measuring rod by which the behaviour of the individual and of others is judged (2) They supply the principles on the basis of which choices are made, when body conditions demand action, they determine what may or what may not be done (3) They represent the crystallized meaning of accumulated experience, the *Weltanschauung* of the individual This is the unifying or integrating thread which runs through and colours the interpretation of all experience, thus supplying unity and individuality (4) They supply the basis for envisaging the future world and for projecting the place of the individual in that world "

The affective factors of life have been studied from various standpoints, and their importance for education has been very ably and clearly shown A very useful bibliography containing a list of 180 books and monographs has been given at the end of the book

This is a pioneer work of great merit and reflects great credit on the Committee that carried on the research It will serve as a guide to educationists and teachers for many years to come

—J D S

*The Progressive School*—A study in methods of Education and of Teaching By W M Ryburn Published by the Oxford University Press Price Rs 4/-

The author has embodied in the book the results of his experience in carrying out experiments in connection with the methods of education and methods of teaching

It is a lofty aim that the progressive school sets before itself "It should be the aim of the progressive school to produce prophets There is a universal demand to day for inspired leaders, for those who will stand for the forces of spirit against the powers of materialism, for those who will reinforce the soul of man and enable him to act up to the possibilities of his nature The world needs spiritual enthusiasts The organized forces working for the welfare of mankind are ineffective and of small account in the eyes of men because they do not provide a living battle front nor the morale of an advancing host There is too little 'going over the top' and too much 'trench warfare,' and

trench warfare never inspired anything but boredom and disgust." That alone is a real school in which the child is educated *for life through life*. The progressive school is *child-centred* in contradistinction with the older type of school which is subject-centred. It tries to develop the personality of the child—his body, mind and spirit, to train the pupils to be constructive workers for progress.

The author's outlook is very sane and healthy. He has incorporated in the book short discussions of some very important and interesting topics, e.g., Freedom in School, the School and the Individual, the Project Method, the Group Work, the School and the House, the School and the Nation, Handicrafts, Examinations, etc. It is difficult to find together in one book so many useful topics treated in such a lucid style. Both the author and the publishers deserve congratulations for bringing out this book. All teachers, trained or untrained, will do well to go through it carefully.

—J. D. S.

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*Hints On Museum Education*—Written and published by J. C. Basak, 363, Upper Chitpore Road, P.O. Beadon Street, Calcutta. Price Re. 1/-.

The title of the book does not very clearly indicate the subject-matter. This is a book on Educational Museums. In our country, there is a lamentable dearth of museums containing exhibits suited to the requirements of students. Museums can be of great help to the teacher in imparting a lot of useful information to the students. "Educational Museums should contain exhibits covering all departments of life, with special emphasis on the modern arts and sciences, and important industries and discoveries, all arranged and classified in such a way that they can be examined at close quarters and actually handled under the supervision and guidance of a competent guide or instructor." The author has given many useful hints on organising such educational museums. Those in charge of museums, and educationists in general will profit immensely by a study of this book.

—J. D. S.

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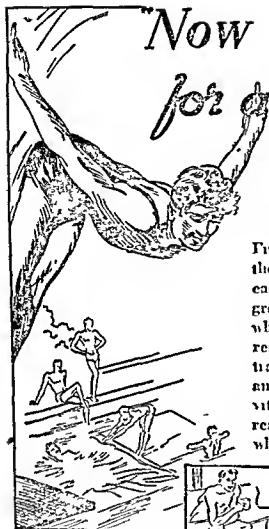
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VOL. III

No. 10

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR:  
D. P. KHATTRY



OCTOBER, 1938

ALL-INDIA FEDERATION OF  
EDUCATIONAL ASSOCIATIONS

POST-BOX 52, CAWNPORE

PRICE ANNAS EIGHT

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### Editors' Note

The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments, (d) articles containing statistics and their application to the solution of educational problems, (e) short notices of original works, (f) news of interest to educational workers.

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## IDEALS OF UNIVERSITY EDUCATION

BY

V. N. CHANDAVARKAR, B.A. (Cantab.),

*Vice-Chancellor, University of Bombay.*

*(Extracts from the Convocation Address, 1938.)*

I would like to make a reference to the report of the Committee recently appointed by the Government of Bombay to advise them "on the question of vocational training for boys and girls in primary and secondary schools in the Province of Bombay." This Committee, on which there was no University representative, and which had nothing to do with the question of higher education, or with what should be the test of entrance to the University, have gone out of their way to recommend the abolition of the Matriculation Examination, and to advise that the entrance to the University should be by tests held by affiliated colleges. These recommendations have led to a prevailing impression among the public that the Government have decided to abolish the Matriculation Examination, which the University has rightly claimed as entirely its own affair, being purely and simply an entrance examination to the University courses of study. I would like here to sound a note of warning. It is not the first time that the question of abolishing the Matriculation Examination has been raised, nor is it the first time that the University has been advised to modernise the Matriculation Examination and to provide alternative courses of study. Such efforts have been made in the past and have failed. As a result of six years' experience gained in this University, I would earnestly request Government to leave the question of the Matriculation Examination to be dealt with by the University.

What has been worrying me, however, and, I am sure, has been worrying people interested in the cause of education in this

country, is the attitude towards higher education of certain influential persons who control the policies of the Provincial Governments of the day, and this attitude has raised an apprehension in our minds that higher education is in danger of being starved. The problem of higher education is our main concern, and I think it necessary that I should say something about it here, particularly, in view of certain recent pronouncements regarding it. There is a great danger in accepting the principle that higher education should be self-supporting, and that the liability of the State should be restricted to educating persons whose services are required by the State. Apart from the narrow utilitarianism on which this principle rests, to advocate it is to shut one's eyes to the teachings of political philosophy. The interest of the State does not lie solely in the production of clerks and officers needed for carrying on the administration of the country. Government is not an end in itself. It exists for the good of the country. The needs of the country are greater and far more important than the needs of the administration. While the country requires the services of persons who can run the administration, even more does it need the services of publicists, educationists, industrialists, scientists, leaders of thought, members of the learned professions and, above all, good citizens. Higher education is as essential for the life of a nation as primary or secondary education. Higher education has a cultural as well as an economic value. It may be argued that the holding of examinations and award of degrees and diplomas being the functions of Universities, the latter can very well be expected to support themselves by charging adequate fees for admissions to their examinations and for the award of degrees and diplomas, and that only those who can afford to pay such fees should take advantage of University education. Whatever may have been the conception of the main function of Universities in days gone by, it is becoming increasingly clear that the holding of examinations and the conferring of degrees and diplomas are not the only purposes for which Universities exist. Universities have, indeed, a much higher function to fulfil in the life of the nation. They play a very important part in that life, not only by liberalizing the spirit and ennobling the soul of the nation, but also by helping the nation to increase its material wealth by promoting scientific and industrial research. Even in a country like England, it is only since the Great War that the people have begun to realise the necessity of linking up the work of Universities with the industrial needs of the nation. Julian Huxley in his thoughtful book on "Scientific Research

and Social Needs" points out that "in addition to the broad scientific background of research which the Universities provide, out of which new applications grow, the newer Universities in industrial towns like Sheffield or Leeds or Manchester contain departments in which very practical research is going on in subjects like civil, chemical and electrical engineering, metallurgy, mining, oil technology, leather research, textiles, dyeing and fuel research . . . Even the older Universities of Oxford, Cambridge and London are showing their adaptability to the changing needs of society by organising semi-practical departments." What I wish to emphasise in this connection is that in all these cases, while some of the money comes from special endowments, old and new, a great deal comes out of the government grants to Universities. The remarks of Huxley about the Universities of England apply with, perhaps, greater force to Universities in this country.

We in Bombay, it must be admitted, have been rather backward in promoting the cause of scientific research in this country, although since the time of Lord Sydenham our University has rightly attached an increased value to science and the practical methods of studying it. Recently, in 1934, our University instituted its Department of Chemical Technology to provide technological education and to give training in research methods with a view to producing men who may be useful to industry not merely as efficient workers but as persons whose training in methods of research may enable them to suggest improvements in the various processes of manufacture. The University has been spending on this Department more than Rs. 1½ lakh every year. In addition to the money that has been spent on this Department, the University has for the last two years given direct encouragement to research by providing money to the extent of over Rs. 10,000 annually for instituting research studentships in the various affiliated Institutions.

For the expansion of all our activities private effort is no doubt necessary, but the moral and the material support of Government is equally necessary. The fact that, in spite of financial stringency, the Government of Bombay have hitherto maintained intact the grants to colleges, and have even provided funds for the revival of the old Deccan College in the shape of Departments of psychology, education and postgraduate training, encourages the hope that the Government of Bombay, at any rate, will not accept the doctrine that higher education and scientific research have no claims on the Government, and that the rumours

we have been hearing of late of the proposal to abolish the Elphinstone College and to close down the science departments of the Government Arts Colleges in the Province have no foundation. Indeed, it would be a strange irony of fate if the responsible Governments of the day, in possession of power, for the acquisition of which they had to put up a strenuous fight, were now to refrain from doing the very things which the former bureaucratic government was blamed for not doing.

Another important problem on which I wish to say a few words is the problem of unemployment, which has been agitating the public mind not only in this country but in all countries of the civilized world. It is often forgotten that this problem is primarily an economic problem, and that it is, therefore, the duty of the State to tackle it. The State is one of the largest employers, and is in a position to influence other large employers like municipalities, local boards, commercial corporations and industrial concerns, which depend upon the State for patronage and support. The Universities can, no doubt, make their own contribution to the solution of the problem by providing the right type of education and helping the employer to recruit the right kind of person. To expect the Universities to do more is to ignore facts. The impression that the Universities by means of employment bureaux can create employment or appointments is far from correct. To my mind the problem of unemployment is aggravated by the methods in use for recruiting persons for appointments under Government, under semi public bodies or in commercial firms. What happens generally is that such appointments are based, not on the merits or the suitability of the applicant for the post to which he is appointed, but on personal, and sometimes on communal grounds. The result is lack of efficiency, a feeling of discontent and bitterness and an increase in the number of highly qualified persons without employment. Those who are less qualified, or have no qualifications, thus keep out the qualified and the deserving. It is only Government that can remedy this state of affairs by putting recruitment to the public services on a proper basis. Except for the technical and the specialised appointments, it is desirable that all Government and semi Government services, lower as well as higher, should be recruited by means of competitive tests. So far as Government are concerned, the problem has been solved, to a certain extent, by the appointment of Public Service Commissions, both by the Central Government and by the Provincial Governments. As regards appointments in commercial houses, it is essential that in the various provinces they should be made

to recruit their staffs through the agency of Appointments Boards, constituted under the auspices of the Universities, and on which the various commercial institutions of the provinces are duly represented. Such Boards can, however, prove effective only if Government recognise them and bring influence to bear upon the commercial houses to utilize the services of these Boards in recruiting their staffs. Speaking for myself, I can say that this University would be the first to co-operate with Government in the establishment of an Appointments Board, if it is assured that the Board would be made effective in the manner I have suggested. In this connection, I am glad to mention that three or four European commercial houses have already availed themselves of the assistance of our University in recruiting the members of their higher staffs from among the graduates of this University. I am thankful to them for what they have done, and I hope that more commercial firms, Indian as well as European, will avail themselves of the University's services for recruiting their staffs.

While on the question of unemployment, I think it would not be out of place for me to mention that this University is fully alive to its responsibilities to its *alumni*. Our University was the first among the Indian Universities to make a strong representation to the Secretary of State for India, complaining of the differential treatment accorded to Indian students competing for the Indian Civil Service Examination in England by insisting on a minimum residence of two years and the possession of an Honours Degree or its equivalent at an approved University in the British Isles as a condition precedent for entering the competition. Apart from the discrimination that was thus made by the revised rules of admission to the examination for the Indian Civil Service in England between European and Indian candidates, the restrictions that these revised rules for recruitment have placed upon the rights of Indian students to appear for the Civil Service Examination in England, and the preference given to the Honours Degree of British Universities are most repugnant to the essential principle of open competitive examination for administrative appointments, and, in fact, lay down a principle of discrimination against Indians themselves in respect of appointments to services in their own country.

As pointed out in the representation made by this University, it is more than a hundred years since the people of India commenced voicing their grievances in respect of appointments to the public services. The Act of 1833 made Indians eligible to all offices under the Company, and the Act of 1858 provided that the Secretary of State in Council should, with all convenient

speed, make regulations for admitting all persons, being natural born subjects of Her Majesty, who may be desirous of becoming candidates for appointment to the Civil Service of India to be examined as candidates. The Queen's proclamation of 1858 contained an assurance that all subjects of the Crown, irrespective of class or creed, would be admitted to offices under the Government freely and impartially. As long ago as 1860, a Committee appointed by the Secretary of State recommended that two examinations should be held simultaneously, one in England and one in India, and that those who competed in both countries should be classified in one list according to merit. It was not until the year 1893 that official recognition was given to this principle of simultaneous examinations by the House of Commons passing a resolution. The resolution, however, remained a dead letter, and partial effect was given to it only about 11 years ago, and now, instead of making the competition as open as possible, both in England and in India, we have these new rules shutting the door in England to the best talent in this country by artificial barriers of residence and restricted University qualifications.

Although it is now a year since this University made its representation to the Secretary of State for India, it is only very recently that we have heard that he has declined to remove the handicap on Indian students complained of in the representation. This University, however, ought to be thankful to the other Universities in the country and to the Inter University Board for supporting its representation.

Graduates of the University, my advice to those of you who are still within the portals of the University is to utilize to the full every opportunity you have of cultivating those virtues that thrive best in a corporate life, which brings together a large number of individuals, differing from one another in upbringing, habits, temperament and ideas, but working together with one single aim, namely, to equip themselves for a life of usefulness and service to the country and to the world. To those others who have already crossed the threshold of the University and are about to enter the arena of the world, my advice is, "Carry with you, wherever you go, and whatever you do, the high and noble ideals which you have imbibed from the lessons of history and biography, the teachings of the poets and philosophers and of your own professors." My final word of advice to all of you is, "Never cease to be student." Small as that phrase is, its implications are manifold. A student is essentially an idealist.

The idealism of the student is badly needed in the world today, where we find individuals, communities and nations quarrelling over petty differences, forgetting the ideals of love, unselfishness and truth preached by prophets and religious teachers from the earliest times. The word "student" conjures up the picture of a humble and ardent seeker after truth. The greater the humility, the greater will be the knowledge that comes his way. Again, the word "student" connotes hope, ambition, sympathy, a forgiving nature, generosity and kindness to one's fellows, qualities which are extolled in public life, the more because they are so rarely to be found. A student is loyal to his friends, to his college, to his University. He always strives to be better, to learn better and to do better. If all of us were to preserve and practise these virtues, which come naturally to the student, largely because of the purity of the atmosphere and traditions which surround the temple of learning, we should transform the world into a much better place than we find it today. I earnestly call upon you, my young friends, to continue to be students to the end of your lives by retaining the idealism, the humility, the generosity, the love of truth, the honesty of purpose and the zeal which characterise the student in his College life.

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## TWO REMARKABLE EXHIBITS

The Empire Tea Pavilion in the Empire Exhibition at Glasgow had two remarkable exhibits to display. One of these was a 130-year old teapot of rare Staffordshire china and is valued at over £300. This teapot is said to be large enough to brew  $3\frac{1}{2}$  gallons of tea at a time! The other interesting object was a tea-kettle, which might also be described as a teapot. It is said to date from 2,000 years ago, when tea was made simply by plucking the green tea leaves and boiling them over a fire. Tea made in this manner must have been indescribably bitter, but in those early days the art of tea brewing as we know it today had not been discovered.

—*Indian Tea Bulletin No. 6. 1938.*

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## VOCATIONAL TRAINING IN BOMBAY PRESIDENCY

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"Over two thirds of the population of the province live on agriculture. Our primary schools which are to cater mostly for the children in the rural area (i.e. for children of agriculturists and artisans who form the main bulk of the population) fail to appeal to an average villager. The reason is not far to seek. The village child is made to sit still for long periods at a time in the school room. The result of several years' schooling of this kind often is that the child grows into a weakling that is unable to stand the sun and the rain and is thus not of much use for hard work in the field. What little book knowledge the child acquires does not appeal to a vast majority of the villagers, who, though generally illiterate, possess a strong common sense. Brought up on books and nothing but books, the village child looks down upon manual work. Conditions in urban areas are much the same." This briefly represents the analysis of the present position of education in this Province as surveyed by the Committee appointed to advise Government on the question of Vocational Training for boys and girls in Primary and Secondary School.

\* \* \* \*

Continuing the survey of the present position the Committee observe that the position regarding the Secondary School boy is not very different. He begins his English education after acquiring a smattering knowledge of his own mother tongue and for seven long years he reads books and does little else. He is supposed to do Nature Study at the Middle School stage through observation, collection and excursion. What he really does is to read a book on Nature Study. At the High School stage in the science laboratory he watches his teacher making some experiments and repeats them. The Secondary School provides neither optional courses nor definite practical work. Agriculture, art, crafts, technology, commerce have no place in the present stereotyped system of secondary education.

What is needed is a re-orientation of educational ideals. Education must be made thoroughly practical, both in the primary as well as secondary stages, with a view to bringing our schools into intimate touch with the life, needs and traditions of the people.

\* \* \* \*

After careful consideration, the Committee have come to the conclusion that the principle of 'educating children through purposeful creative activities leading on to productive work' is sound, its adoption is best calculated to remedy the main weakness obtaining in the present system of education.



Referring to the stages and duration of school course, the Committee say :—

“We are of opinion that a continuous course of seven years should be the minimum education for every citizen, that this course should constitute Basic Education and should be called ‘Primary.’ Standards I to IV should be called lower primary or elementary and Standards V to VII upper primary.

“We recommend that the Standards of the Primary Course be numbered consecutively as Standards I to VII.

“We are of opinion that the Secondary School Course should begin at the end of the seven years’ course of Primary Education.

“We recommend that the duration of the Secondary School Course should be four years, the Standards being numbered VIII, IX, X, XI in continuation of the Primary Standards I to VII.”

The Committee feel keenly that systematic training of pupils of pre-school age should be provided for by the organisation of separate Kindergarten Departments or Montessori and Nursery Schools under specially trained teachers. While they realise that, for financial reasons, it is not possible to provide immediately “Kindergarten, Montessori, or Nursery” Schools for children of pre-school age, they recommend that the responsibility of the State in this respect should be steadily kept in view and necessary provision in this direction should be made as soon as practicable and that in the meantime, properly constituted private institutions should be encouraged to organise such schools.

As regards the age compulsion, the Committee come to the conclusion that six *plus* should be the age of admission to schools as well as the minimum age for compulsion.

“We have already recorded our opinion that a continuous course of seven years should be the minimum education for every citizen and that it should constitute Basic or Primary Education. It is essential for the intelligent exercise of the vote and the satisfactory working of representative institutions. It is also necessary for the improvement of the general efficiency of citizens, as also for the attainment of permanent literacy.

“While we realise that for financial reasons compulsion cannot at present be enforced beyond the age of 11 or Standard IV, we are of opinion that for the full attainment of the objective of Primary Education the ultimate aim should be a seven years’ compulsory course for boys and girls” —

The Committee stress the fact that education to-day suffers from an excessive amount of book-work. The child sits cooped up in the classroom from day to day and from year to year, conning his books and filling his note-books, reading, writing, reciting, listening to the monotonous drone of the teacher’s voice, and having his head crammed with as many scraps of knowledge as possible. Instruction within the class-room is altogether divorced from the world without, and the child remains out of touch with the practical realities of life, the shadows of which he so assiduously or listlessly pursues in his books. The dull monotony of desk-work seldom rouses the living interest or the

intellectual curiosity of the child. Sedentary work continued over a long period of time, has a disastrous effect on his physique, and passive absorption of knowledge, needing little active effort on his part kills all originality and spontaneity and cripples him, mind and soul.

"To remedy this state of affairs, the Zakir Hussain Committee's recommendation is that some 'basic craft' be selected around which all school work could be centred. This would be possible to some extent with 'crafts' that are really 'basic,' broad and fundamental, 'rich in educational possibilities' and touching the life of the child and the community at all points.

"We are of opinion that among others the following should be chosen as basic crafts in the reorganised primary schools —

- 1 Agriculture including subsidiary occupations—Rural Area
- 2 Fruit and Vegetable Gardening—Rural and Urban
- 3 Spinning and Weaving—Rural and Urban
- 4 Wood work—Rural and Urban
- 5 Clay work—Rural and Urban
- 6 Home craft—Rural and Urban

"We are of opinion that at the primary stage not more than half the school day should ordinarily be devoted to formal instruction in the class room."

The Committee make numerous other recommendations regarding primary and secondary education and allied matters. These may be briefly summarised as follows —

The Committee consider that Central Schools should essentially be schools of general education. They should be labelled neither vocational nor pre-vocational.

The articles that are produced by school children under the new scheme of education should have as far as possible usable and/or marketable value.

In view of the fact that Hindustani is fast becoming the national language of India it is desirable that people in the non-Hindustani Provinces should have a working knowledge of every day spoken Hindustani. Suitable provision should be made for the teaching of Hindustani in the upper primary standards.

Special impetus should be given to the spread of education among girls and that in every scheme of compulsory education preference should be given to girls.

In view of the present schools being examination ridden, external examinations should be abolished. Heads of Schools should hold their own examinations and make promotions after taking into account the record of the pupils' attendance work in the class room, farm and workshop and in general extra school activities as also his performance in school examinations.

Provision should be made at suitable centres for continuation courses for the benefit of children who may leave school before completing the full primary course.

Early provision should be made for more training institutions and for an increase in the number of places in the existing women's training institutions with a view to securing more trained women teachers for lower classes of primary schools.

For the success of the scheme of Basic Education, it is essential that provision for a four years' normal course (on a par with the Secondary School Course) for the training of teachers of basic schools should be made and that at least one such normal school should be maintained for each district.

Special training institutions for the training of teachers of Central Schools and Supervisors should be organised in all Educational Divisions and arrangements should be made in these institutions for vocation or refresher courses for teachers already in service and also for the systematic use of the Cinema. Radio. Museums. etc., as definite aids to work in schools.

Supervisors of primary schools should be specially trained for their work and that each such supervisor should ordinarily be in charge of about 50—60 schools with headquarters near about the centre of his beat.

### Secondary Education.

As regards the problem of Secondary Education the Committee suggest that the Secondary School Course should begin at the end of the seven years' course of Primary Education.

Managements of High Schools wishing to maintain Standards V to VII of the Primary Course should be encouraged to maintain classes for the full seven years' primary course.

The duration of the Secondary School Course should be four years, the Standards being numbered VIII, IX, X, XI in continuation of the Primary Standards I—VII.

It is proposed that the Secondary School Course should be divided into two groups:—

- (1) General and (2) Science.

The four years' course should be divided into two stages:—

- (1) Standards VIII and IX and (2) Standards X and XI.

For Standards VIII and IX, the course should be common to all, with the exception of practical work.

Further a special committee should be constituted to draw up detailed syllabuses.

To start with, teachers of requisite qualifications for Vocational work should be selected so far as possible from among teachers who have worked or are working in Vocational Institutions of good standing and established reputation, in consultation with a Board of Experts.

In Secondary Schools the mother tongue should be the medium of instruction in all subjects except English and Hindustani

The Committee think that English should not ordinarily be introduced before the first year of the Secondary School Course, i.e., before the commencement of the work of Standard VIII. If, in any locality, there is an effective demand for the teaching of English in the higher primary stage and if thoroughly satisfactory arrangements by the appointment of a qualified teacher or teachers for instruction could be made, instruction in the language may be permitted as an optional subject from that stage without any financial obligations on Government

The aim of teaching English should be essentially practical. Since the whole system of Secondary Education is examination ridden the Committee recommend that with a view to remove the tyranny of the Matriculation Examination Heads of Secondary Schools should be permitted to hold their own examinations and issue Secondary School Leaving Certificates on the basis of full four years record of pupils' work in the class room on the playfield in the workshop in the social and general activities of the school, as also his performance in the school examinations

The University be moved to have the present Matriculation Examination replaced by special tests or examinations for entrance to Colleges affiliated to the University with a view to securing right type of students for University courses none but those holding the requisite Secondary School Leaving Certificates being considered eligible for admission to the entrance tests of Colleges

Till such time as the University decides to abolish the Matriculation Examination it should be moved to take steps to improve the Matriculation Examination by providing alternative courses of studies and by modernising the Examination generally

English teaching Schools that are permitted to teach English from the initial stage (as the mother tongue of the pupil is not one of the recognised languages of the Province) may continue to do so as at present provided that the schools arrange for regular instruction in one of the recognised languages of the Province and/or in Hindustani

The Department of Education should arrange for the periodical inspection of Vocational work in secondary schools in consultation with a Board of Experts

### General

The Committee recommend that the curricula sanctioned by Government should be regarded as standard in which alterations or modifications not inconsistent with the principles and spirit of the sanctioned course may be made to suit local or special conditions after intimation in writing to the Department of Education before the commencement of the school year

An Advisory Board of Education composed of official experts in the different branches of education and non officials eminent in educational,

vocational, business, or social activities, should be constituted. Its functions should be:—

- (1) To advise Government on matters of educational policy and practice.
- (2) To collect information about educational activities and experiments in other parts of India as also in foreign countries.
- (3) To issue bulletins disseminating modern ideas in education.
- (4) To suggest ways and means for securing the co-operation of State utility services as also of commercial and industrial firms, particularly in the matter of prevocational training.
- (5) To suggest arrangements for vocational guidance to pupils in secondary schools.

The Advisory Board should appoint sub-committees for (1) general education and (2) pre-vocational training with powers to co-opt experts.

The Committee are convinced that for the success of the new scheme it is essential that a Special Publication Bureau should be constituted for the preparation of books and appliances for the use of teachers as also for village libraries, school children and literate adults.

The emoluments of teachers in primary and secondary schools should be in accordance with the standard scales of pay that may be laid down for other public servants of similar attainments and responsibilities.

The scale of grants to aided schools should be revised to enable them to employ qualified teachers on adequate scales of pay with reasonable fixity of tenure and provision for old age and also to enable them to meet the extra cost involved by the provision of practical work in primary and secondary schools.

The Committee stress the need of libraries specially meant for the benefit of children who cannot continue their school course beyond Standard IV and suggest that Government should publish pamphlets giving information about careers for pupils and also about the preliminary education needed for such careers.

Part-time classes for continuation or vocational education of those who cannot avail themselves of education in day or full-time schools should be organised as suggested in the Abbott-Wood Report, wherever there is a demand for them.

In view of the fact that this Committee has put forward a Scheme of Primary and Secondary Education with substantial practical instruction, it is essential to provide an adequate number of specialised vocational, industrial, trade and technical institutions. Government should take steps for the establishment of such institutions.

### Transitional Arrangements.

The Committee suggest measures for transitional arrangements and propose that a Special Officer not lower in rank than a Divisional Edu-

cational Inspector be appointed immediately to organise all work in connection with the initiation and development of the Scheme of Basic Education, that he should act in consultation with a small Advisory Committee specially constituted for the purpose and that he be given the help of necessary Assistants.

Compact areas providing necessary facilities be selected in each district to try the experiment of 'Basic Education'. So far as possible, all schools in such areas should be transformed into schools of the new type the full Primary Schools within the areas being organised as Central Schools, i.e., schools teaching the full seven years' basic course with arrangements for instruction in two or more productive crafts.

The above experiment be tried in the first instance during 1938-9, that if the results are assuring enough the scope of the experiment be extended during 1939-40 that the position be reviewed fully before the end of 1939-40 and that in the light of experience gained arrangements for the complete reorganisation of Primary Education be made within five years.

The Committee are convinced that for the success of the Scheme of Basic Education it is essential that immediate arrangements for the special training of select trained teachers preferably with aptitude for productive or manual work of some kind should be made separately for each Educational Division. The emergency course of training at the start should be of about six months and the instruction should include among other things—

- (1) Training in at least two basic crafts
- (2) Formulation and working of simple projects and schemes of correlated studies
- (3) Inculcation of ideology of education through productive work i.e., method of learning by doing relating education to actual life scope of initiative, sense of social responsibility spirit of social service for national co-operative community
- (4) A Special Course in Physical Training, Drawing and Music
- (5) A short course in Physiology, Hygiene, Sanitation, Dietetics, Social studies and Hinduism
- (6) Teaching of at least 25 lessons in the practising school under proper supervision

These training schools should be residential institutions where the individual teachers under training have opportunities of receiving training to live a vigorous social life in an atmosphere of perfect co-operation.

Finally it is suggested that the supervisors for the experimental schools should be select men and women who should be specially trained to enable them to supervise and guide the work in the reorganised schools in their charge.

## THE NEW PHYSICS

BY

SIR C. V. RAMAN.

An Irishman, if there be one amongst my listeners,\* might feel inclined to ask me the question: How old is this New Physics about which you are talking to us? My answer would be: Exactly forty-three years old and still going strong. The world heard the new baby crying when it was born—I am referring to the enormous excitement created by the announcement of a German Physicist, Rontgen, that he had discovered a new kind of radiation with amazing properties, which we now call by his name, or alternatively as X-rays.

This experimental discovery by Rontgen had far-reaching effects. It opened the eyes of men of science to the fact that the courageous and patient investigator could hope to discover new phenomena in Nature undreamt of in the natural philosophy of the nineteenth century. Rontgen's discovery, in fact, was the beginning of the New Physics. The stimulus to novel types of experimentation which it gave resulted in a whole new crop of discoveries, many of which in their intrinsic interest and importance are not surpassed even by Rontgen's own magnificent finding. During the past four decades, the spate of new phenomena has flowed into physics with undiminished vigour, so much so that it is becoming increasingly difficult even for a man of science, excepting, of course, the discoverer himself, to feel thrilled by a new physical phenomenon.

I will not fatigue you by a recital of the names of even the most outstanding investigators who have built up the physics of to-day. Their names and their discoveries are known to every student of physics. They are claimed as nationals by one or another of many different countries. Yet in the truest sense, they belong to the whole world and to the International Brotherhood of Science. I will permit myself to mention only two of the greatest pioneers. Amongst the priceless memories that a man of science like myself treasures lifelong is that of personal contact with such leaders of science as the late Lord Rutherford and the late Madame Curie; their contributions to the building

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\* A talk broadcast from the Madras Station.

of the New Physics have been most impressive, and their influence on their generation and on the progress of science almost incredibly great.

I would not be fair either to my listeners or to my subject if I conveyed the impression that the New Physics has been built up entirely by the work of experimenters. This is far from being the case. Indeed, the amazing progress of the New Physics has been due to no small extent to the courageous leadership and constant guidance given to experimenters by the theoretical physicists or natural philosophers who in their turn build on the foundations firmly laid by experimental discovery. I do not believe there is a single listener to my talk who has not heard of Einstein and his relativistic philosophy which forms an integral part of the framework of thought in the New Physics. Not all my listeners, however, might have heard of Professor Niels Bohr of Copenhagen. But, in the view of many, including myself, he is the greatest natural philosopher of the day.

The work of Niels Bohr in building up a theory of atomic structure which has inspired a host of experimenters in their work is one of the greatest triumphs of the human mind.

You may well ask: What has the New Physics achieved? One has only to look back to the physics of my college days at Madras thirty years ago and to look at the physics of today to appreciate the difference. The old physics was successful chiefly in giving what might be called a macroscopic or large-scale description of natural phenomena, that is to say, a statement of observed facts regarding the properties of matter, heat, light, sound, electricity and magnetism. On the other hand, its attempt to interpret the observed facts in terms of atomic and molecular concepts was definitely a failure except in a severely restricted field. The reason for this failure was that the old physics had practically no foundation on which to build. This foundation has been supplied by the discovery of the ultimate sub-atomic units constituting matter and the laws of their interaction. The detailed explanation of all physical phenomena and of the physical properties of matter has in consequence become a practical proposition. A very great measure of success has been achieved in this respect in every one of the recognised divisions of the older physics. Whole new territories of phenomena, not contemplated by the older physics, have also been opened up and brought under the rule of the New Physics.

Not content with these triumphs, the New Physics has entered the field of Chemistry and has sought to find an explana-



tion in terms of sub-atomic processes for the well-ascertained facts of Chemistry regarding the reactions of atoms with each other to form molecules. Such a task could scarcely be considered superfluous. For, one of the essential facts of chemistry is that the strength of chemical combination and the energy required for or released by such combination is very different in different cases, and it is only in physical theories that it is possible to find any real understanding of these facts and, indeed, also of the real nature of chemical combination. The success of the new science known as Chemical Physics has transcended all expectations. Indeed, it is not unreasonable to hope that before many years pass, theoretical chemistry will come to be regarded as a branch of mathematics.

What has been the secret of all these amazing successes? Simply stated, it is the elimination of the Newtonian mechanical laws from the field of atomic and molecular physics and their substitution by other and new laws governing sub-atomic processes. It would take me too long to go deeply into the theoretical aspects of the New Physics. It must suffice here to say that they involve revolutionary change in our outlook regarding natural phenomena and their explanation. The present generation has not yet had time to fully understand and absorb the new theoretical outlook; but the latter has abundantly justified itself by its success in handling problems of the most varied nature. To the next generation, the new modes of thinking now required in our science will doubtless become quite habitual.

I must not neglect to make at least a brief mention of the most recent spectacular triumphs of the New Physics, namely, the creation of new chemical elements by artificial transmutation of known elements. Lord Rutherford's last little book on the Newer Alchemy gives a very clear and fascinating account of this newest physics. The remarkable advances described therein were not due to any accidental discovery but were the natural result of the intensive study of the atom and of its structure which is characteristic of the New Physics. The chemical identity of an element is determined by the nucleus of the atom, that is, by the very small and dense core of the atom. By bombarding the atom by other swift atomic projectiles, transformations may be induced. In many cases the new elements produced are radioactive, in other words, they give off electric particles and spontaneously transform into other elements in the manner of the naturally radio-active elements.

For the production of the swift atomic projectiles, used in these new syntheses of the chemical elements, amazing new types

of apparatus have been developed in which figure gigantic electro magnets or electro static generators or electric transformers. By means of special ingenious devices these are used to speed up the atomic projectiles to very high velocities corresponding to several millions of volts. On the occasion of my visit to the Paris International Conference of Science last year and in my subsequent tour I was privileged to see several of these installations in operation. In their boldness and novelty of conception, and in the purposes to which these are used, these contrivances fittingly represent the spirit of the New Physics.

The vast body of new knowledge which the New Physics has created naturally represents a greatly increased power to use the forces of Nature for good and for evil. In a hundred different ways, Physics has during this period of advance influenced human life and activity. But I would not have you forget that the greatest leaders of our science have always been those whose aim has been the promotion of knowledge for its own sake.

—*The Indian Review*

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## CREATIVE IMPULSE

We are often astonished by the unexpected character of a child's drawing, by the melody of a child's song, or by the wisdom of a child's reasoning. Where everything is yet open, there things are always beautiful.

Open in all schools the path to creative effort, to the greatness of art. Replace banalities and despondency by joy and cheerfulness. Preserve the child from the grimace of life. Give him a bold, happy life, full of activity and bright attainments.

Surely such a new school must have a Great Teacher. We must feel that the Great Teacher will come not only in Love and Truth, but radiant with Beauty. In Beauty only are all the diverse spirit united.

—*N. K. Roerich*

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## TO TEACH?

BY

DR. C. A. S. DWIGHT.

To teach? It is to reach to find  
The hidden laws of the growing mind;  
In boy to see the coming man;  
Then shape him to a splendid plan.

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## IN SEA AND STARS

BY

STANTON A. COBLENTZ.

In sea and stars and mountains,  
Forests and brooks and springs,  
I hear a music breathing,  
A rhythmic beat of wings.

In lakes and rocks and meadows,  
And waters tossed by storm,  
I view the clouded mirror  
Of some indwelling Form;

Of law and might and meaning  
Beyond our power to scan,  
Which from the fields and heavens  
Call to the heart of man.

But why in nature only  
This pulse of things divine,—  
Smothered where chimneys tower  
And wall-girt thousands pine?

Oh, not in nature only  
If but the deeper mood  
Flings wide its own horizons  
From peaks of solitude;

If but the spirit harkens  
That high harmonious tone  
Which sea and stars and mountains  
Chant to the Lord Unknown!

—*World Order*; New York, August 1938.

## CHILDREN—THE CITIZENS OF TOMORROW\*

BY

H R BHATIA, M A ,

*Birla College, Pilani*

We are all in the business of building a better world. There are many plans for improvement and many fine efforts are being made. To my mind one of the most important means of improvement and development lies in raising a better crop of people, in producing a better generation of men, for after all what matters most is not this system or that but the right sort of people who will work almost any system however imperfect. The wrong men will fail to use even the most ideal arrangements.

This would mean that conditions in homes and schools should be so improved as to help young children to make better men and women of themselves, better citizens who have a keener civic sense, a greater independence of judgment and action, a wider sympathy and culture, a stronger desire not only to create and achieve but also to share with others the fruits of their creation and achievement. If the child is the father of man, if he or she is the man or woman of tomorrow, if early education is responsible for adult attitudes and prejudices, there cannot be anything more urgent and important than the right education and training of children. Training and education look forward to the day when the child will stand alone and meet the obligations of social and civic living. Therefore each parent should understand his child, should know the world in which the child now lives and the world in which he will live as an adult and should educate him for the world that is to be, for a new society that is in the making. Happily the facts of a changing social order are before us and in their light we can reconstruct the ideals of children's education.

Looking about us today we find that in no age was society more unstable than it is at present. Everywhere old forms are collapsing, old methods are proving useless, confusion is increasing, civilisation is in danger. Old values are changing, the old standards of right and wrong, of decency, of regard for elders, of obedience to the unwritten laws are losing their hold on us.

\* A broadcast talk.

Yesterday it was easy to teach the child to uphold what everybody believed, today it is vastly more difficult to explain to the young people the many conflicting standards of our cosmopolitan neighbourhood and to help them to realise the fact of a rapidly changing environment. Parents and teachers should recognise this fact of a changing order and since it is difficult to know what the next day may bring forth and since all our rules and guidance taught with so much pain and effort may prove useless, parents and teachers will do best to equip the child with a spirit of independence of judgement and action. Teach children to think and act for themselves, to solve their problems for themselves, to meet the challenge of old customs and bigotries that are gradually vanishing and of new struggles and temptations which are becoming ever stronger. Unless children move out into the new social order with a new culture adapted to the needs of modern life, with a new outlook that can appreciate the changing values of civic life, shorn of dogmatism and provincial prejudices, they will neither be successful nor happy in their experiences with different peoples, different ways of living, different ways of thinking which science is making increasingly possible. If, therefore, we wish our children to grow into better citizens with a sincere desire to build a new and better world, let us give them broader sympathy, ability and courage to think and act freely and to take an intelligent and fair view of things around, and a genuine spirit of public service.

Our civic life today lacks both balance and peace. It is because individual success, individual efficiency and competition and rivalry are overemphasised at the cost of co-operation and comradeship. Civilisation should bring people closer together, it should lead to greater interdependence of individuals and in one sense we become civilised in direct proportion as we learn to co-operate with others on behalf of mutual interests. But how far are we from this ideal. We have succeeded in producing ample supplies of goods but we are unable to distribute these goods to those who stand in need of them. We are equipped with an amazing set of machines for production while millions live on the margin of starvation. The present economic crisis is nothing but the result of our unbalanced and lop-sided civilisation. We know how to produce things, how to run factories and successful business houses, but we do not know how to get on together. Progress would be impossible unless parents and teachers realise that co-operation will turn out better for society than unrestrained competition. No doubt the spirit of competition is the greatest source of individual effort and children do

their best only when they try to excel others, but if the range of competition is graded and widened so that every child has an opportunity to succeed as well as to fail, he will not only develop self esteem but also respect for the abilities and worthiness of others which is the basis of co operation. As soon as children are able to run about in play, individual rivalry should be replaced by group rivalry in which success is won in a team spirit by striving for the group and not for personal distinction alone. Play teaches social responsibility, fair play and consideration for the rights and feelings of others.

In the home there are a number of things which parents and children share together and use by turns, there are a number of things which they choose and buy with mutual consent, there is a greater give and take and there are many opportunities for members to consider and meet the needs and desires of each member of the family. One individual has to give up his own choice and right for the best interests of the group of another person in it. This has a real value in developing in even the youngest members a fine spirit of group consciousness, co operation and unselfishness, qualities which go to make useful citizens.

Children should be allowed greater freedom in forming friendships. They should meet not only their equals but also their juniors and seniors lest they should develop inferiority or superiority complex. The value of varied social contacts with people of different ages, abilities and temperaments is all the greater considering that it is in knowing others that they come to know themselves, to see themselves as others see them and to develop a balanced view of themselves and their associates. They should be encouraged to bring their friends home with them and play with them in the yard or entertain them. Some parents feel that the children of the neighbourhood are inferior to their own child and so encourage in him anti social attitudes. This is bad even though there may be some children with whom one does not like his child to play. Social relations mean so much for the child's happiness and are so valuable for training him for later life that it is better for the parent to let the child alone and feel confident that he will come through without harm. After all the child has to learn to live with other people and the only way to learn it is by living with them. Some advice casually given will help him more in detecting undesirable people than flatly prohibiting him from seeing particular people. Varied social contacts will teach the child that others will act and feel towards him as he acts and feels towards them and will educate

him for co-operation, fellowship and social adjustments so badly needed in life.

Our civic life lacks the right sort of leaders and the right sort of followers. For this bad social training in childhood is responsible. If children are given opportunities to choose their associates and their leaders, if they have enough social experience in sampling human beings for their purposes, they will learn to distinguish between situations when they should lead and the situations when they should follow. The citizens of tomorrow should not only make good followers who acknowledge authority and accept leadership as necessary for safety, co-ordination of effort and progress but should also rise to that higher level of responsibility which challenges authority when occasion arises, which questions routine and rules. Democracy requires that children, after learning to follow the rules, learn further that rules are only convenient tools for facilitating human relations and that the responsibility to improve upon them or overthrow them is as urgent as the responsibility to obey them.

Modern life abounds in lawlessness and anti-social spirit and the citizens of tomorrow should be helped to develop a sense of respect for law and authority. Young children readily accept the idea of a rule or law as guide to conduct and from infancy their respect for law can be well cultivated through a fairly rigid routine in eating, sleeping and playing in the interest of personal health. How readily children accept the rules of a game, they seldom deliberately violate them and yet they never were taught to obey them in the way in which they were taught the multiplication table. If in their early training in the school and the home they learn that rules and laws are made to help and not to interfere, to guide and not to control, human affairs and can be changed as human needs change, much of the lawlessness and anti-social spirit found in youth will disappear. But we must not overlook the fact that much of it is simply an imitation of the attitude of the prominent people of the community and the time whose glaring disregard of the welfare of others in the interest of their own selfish ends is not always followed by the traditional wages of sin. Our culture, our business and professional life, our body politic make up the spirit of the child's neighbourhood and mould him, and as it is they abound in hypocrisy, sham, dishonesty, cowardice, prejudice, injustice. How can we expect the school to fight out the influence of the evil example of the adult community? We cannot expect teachers to effect a really substantial improvement in the attitudes of the citizens of tomorrow unless the citizens of today set a noble

example of public service, fair play, frankness and independence of judgement and action, and conduct themselves as the ideal citizens of an ideal state

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HELEN KELLER, American Foundation for the Blind  
“Judging from what I read about experiments in school and college it seems to me, teacher and student are digging into learning warm with the heart blood of experience. Such advance is full of hope for the future, since we must feel man's struggle in our bodies, as it were, if we are to make our education minister to his welfare. It was because Anne Sullivan put aside precedent in teaching and tried to imagine herself in the silent night where I dwelt that she gained insight to give me the light and freedom of the spirit.”

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# HOW MUCH ALIKE ARE URDU AND HINDI?

(A statistical analysis)

BY

REV. E. W. MENZEL.

*Bisrampur.*

The question of the similarity and dissimilarity of Hindi and Urdu is a very practical one, especially in these days when the need of a *lingua franca* is so urgently felt. Is Hindustanee understood all over North and Central India or only on the borderline between the Urdu and Hindi area, leaving the speakers of pure Urdu and Hindi, unintelligible to each other? A statistical analysis adds much to the information that common experience and the traveller give us.

The extreme difference in script of Urdu and Hindi has kept and will continue to keep the literatures of the two languages apart. Not so the spoken word. The spoken word becomes daily of greater importance with the spread of the radio, "talkie" cinema, rural lectures, political speakers, etc.

The purist of either language looks with horror upon the mixture of the two into Hindustanee. It is true that there is something of both the typical Urdu and the Hindi cultural flavour lost when the two are mixed. But on the other hand the gains in wider extension of interests and cultures, the practical advantages of broader intercourse, and the opportunity of cultivating greater national solidarity through a common language outweigh in importance any reason for undefiled Hindi or Urdu the purist can give. There is enough of communalism, provincialism, and sectarianism all of which flourish most where the language barriers are tallest.

Statistical analysis of the vocabulary of both languages suggests that much can be done to make Hindustanee more widely understood and increase greatly the understanding audience of speakers, radio stations, and (if the barrier of a different script could only be overcome) press and writers. This is of tremendous importance politically, economically, and culturally, especially as the interest in adult education and mass education increases.

A statistical comparison of the vocabularies of both languages became easily possible as soon as a word list of the most important words in each language became available. One can of course compare the vocabulary of both languages without

uch a word list by simply checking words from the dictionaries of both languages but such a comparison tells only a part of the story. All words in the dictionary are not equally important. By means of a word list of the most important words we can compare words according to their importance in usage.

What is a word list? How can you tell which are the most important words in a language? That is easy though a very laborious job. All you need to do is to sit down and count the number of times various words are used in literature or speech. Suppose you count how often the words "*apna*" and "*anhona*" occur in 20 books and newspapers. If you find that "*apna*" occurs 8000 times and "*anhona*" only 14 times you may be quite sure that a person who does not know what "*apna*" means is far worse off than the person who does not know what "*anhona*" means. You may have known that before you went to the work of counting the number of times the words occur (anybody could guess this), but you won't guess correctly nearly as often as you think you will, and in the great majority of cases your guess work won't be so helpful. In guess work there is no certainty.

A great deal of good literature and even a great deal of semi-technical literature can be produced by using a vocabulary of not more than 1000 words. In ordinary intercourse the average man gets along very well with a vocabulary of not more than 2000 words. Many intelligent people practically never use more. Basic English gets along with 850 words and there is a movement afoot sponsored by leading educators of the English speaking world to settle on about 3000 words to be used in literature meant for international circulation. What a boon that will be to those who learn English as a second or third language and not as their mother tongue!

But back to the word lists in Hindi and in Urdu. In Hindi about 650,000 words have been counted and the frequency of each word noted. This work was begun by Mr J C Koenig and further extended by teachers and students working under the sponsorship of the Dept. of Education of the C P. As a result of this work four separate lists have been given us, each containing one thousand words. The first list contains the 1000 words which are used most often. The second list contains the words whose position is between 1001 and 2000 in the list of most frequent words arranged in order of descending frequency. The third list (or third thousand) contains the 1000 words most frequent after 2000, etc. These lists will be conveniently referred to as the first 1000, the 2nd 1000, etc. The words in

each list of 1000 are arranged alphabetically and the number of times each word occurred is indicated after it.<sup>1</sup>

The Urdu list was worked out by staff members and pupils of the Urdu Normal School of Amraoti under the Dept. of Education.<sup>2</sup> The count on which both word lists are based could with profit be greatly extended. Undoubtedly some important words got lost in the continuous rearrangement and retabulation of words which is necessary in this tremendous job of classifying and counting, laks of words, but on the whole the lists are a fair approximation. If further counting is done most of these mistakes and shortcomings can be corrected.

The first thousand words of the lists are certainly the most important. In 650,000 running words of Hindi literature, the one hundred most used words constitute 57 per cent of all the running words counted. The one thousand most common words usurped  $81\frac{1}{2}$  per cent of all the space. Words not occurring in the list of four thousand constitute only 5.7 per cent of the total. But here is completer information.

TABLE I

*Percentage of Running Words Among Most Frequent Words.*

		In Hindi	In Urdu <sup>3</sup>
Among 1st Hundred	...	56 per cent	57.5
Among 1st Thousand	..	81.5 " "	83
Among 2nd "	...	7.3 " "	7
Among 3rd "	..	3.4 " "	3.3
Among 4th "	...	2.6 " "	1.5
Among 4th to 12th thousand		5.2 " "	5.2

<sup>1</sup> These lists are published in *Hastamalak*. Handbook for Primary School Teachers. Indian Press. Jubbulpore, and in "Teachers and Authors List of Four Thousand Important Hindi Words" by J. C. Koenig, Mission Press, Jubbulpore. The latter has an English Introduction on how the word list was made and how it is to be used which will prove of value to anyone interested in word lists.

<sup>2</sup> This list is found in the Urdu edition of the Handbook for Primary School Teachers, Indian Press, Jubbulpore.

<sup>3</sup> The Urdu list did not contain these common words or particles as *la*, *ke*, *ki*, *ko*, *ham*, *ek*, *mera*, *se*, *to*, *liye*, *hi* and *dusra*, assuming these to be important beyond doubt. In order to get comparable figures it

From this it is plain that anyone who knows the most common 2000 words of a language can understand considerably and that if a speaker or writer will confine himself to the 2000 commonest words in the language his chances of making himself understood to people of little education is greatly enhanced. As soon as a speaker or writer uses words not occurring in a list of 2000 his chance of not being understood goes up by leaps and bounds. Any author or speaker dealing with meagrely educated people who does not take this into consideration does not know how to adapt himself and is not fit to assist in mass education.

Such a list should be of immense help to writers and speakers who are really trying to reach people.

Such a list has to be used with common sense. It is neither possible nor desirable to confine one's usage entirely to such a list. If a speaker wants to talk about sugarcane he should go ahead and use the word even though the Hindi word for sugarcane is in the 3rd thousand. And if he wants to mention something that isn't in the list at all he will mention it. The list is not to be used as a hard and fast law but is a guide to be used with common sense. Every center of interest has a certain number of technical terms of its own which have to be used. Some of these are rarely used outside of a certain subject but are common enough to those interested in the particular subject. Recently in a book of historical matter necessitating some technical terminology it was found that the words used (omitting proper names) came from the following lists:

First 1000	Second 1000	Third 1000	Fourth 1000	Not in list
486	201	87	64	126

Those words not in the lists were mostly technical, geographical and historical terms. The book was written for middle school use. The number of running words in the book is 21,000.

But how do the Urdu and Hindi lists compare? That is the real question before us. Let us see how many words from the Urdu lists appeared also in the Hindi lists and vice versa. The number of words are given from each frequency list separately.

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was assumed that the c words and particles occur in Urdu in the same proportion as in Hindi. The Urdu list did not mention the number of words that occurred too infrequently and got into the list. This figure also is assumed to help the same as in Hindi.

TABLE II

*Urdu Words in Hindi Lists.*<sup>4</sup>

	1st 1000	2nd 1000	3rd 1000	4th 1000	Adjustment List	Total
In First 1000 (Hindi list)	445	92	38	26	85	686
In 2nd 1000	115	182	67	39	50	493
In 3rd 1000	68	109	80	43	33	333
In 4th 1000	69	75	63	60	28	295

TABLE III

*Hindi Words in Urdu Lists.*

	1st 1000	2nd 1000	3rd 1000	4th 1000	Adjustment List	Total
In 1st 1000 (Urdu list)	429	161	71	29	18	708
In 2nd 1000	73	169	105	71	24	442
In 3rd 1000	42	64	108	73	18	305
In 4th 1000	32	42	46	56	17	193

Of the most important 100 words of the Hindi language, 90 per cent are very common in Urdu also, about as common in Urdu as in Hindi. Of the most important 100 words of the Urdu list, 96 per cent are found in the Hindi list.

From the above tables the following is evident. The more common the word is in Hindi, the more apt it is to be found in Urdu also. The more common the word is in Urdu the more apt it is to be found in Hindi also. Therefore by speaking simple Hindi we are much more apt to be understood by Urdu people than if we speak "a good Hindi" as the high brows like to call

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<sup>4</sup> The Urdu and Hindi lists are not based on exactly the same rules of counting. For instance, numerals were excluded from the Urdu lists but not in the Hindi; likewise causative forms of verbs, different forms of Pronouns and such very common words and particles listed in the previous footnote. The number of words involved is listed in the "adjustment list." This is necessary to make the two sets of lists comparable.

language which demonstrates the linguistic mastery of the speaker. This is a fact all of us suspected, but the figures bring this out all the more clearly.

A list of words has been prepared which both Hindi and Urdu speakers should avoid if they want to be understood all over the Hindi Urdu area. A separate list of Hindustanee can now be prepared which avoids the peculiarly Hindi and Urdu words and gives only those that are common to both. In this list the origin of the word is ignored. Whether it is Sanskrit, Persian, or Arabic is not taken into consideration but only the fact of whether it is commonly used or not in the literature of both languages.

There are some additional facts which must be taken into consideration in comparing Urdu and Hindi. Approximately 70 per cent of the words in the first 1000 words of the Hindi list occur somewhere in the Urdu lists, leaving 30 per cent of the words of the first Hindi 1000 uncommon to Urdu. But these are the less used words of the first 1000. 81.5 per cent of all Hindi words in the extensive literature examined occur in the first 1000 but after we throw out the words not occurring in the Urdu list, there are still 73.5 per cent of all running words left. On the whole it is the less used words in each 1000 group which are not used by the other language. If a man should confine himself absolutely to the 2000 most common words in Hindi, in excess of 90 per cent of the words he uses should be intelligible to a rather purist Urdu listener even though the speaker make no attempt to adapt himself to the Urdu walla. But when he uses a vocabulary of 10,000 words he will be using a very much higher percentage of words uncommon to both languages. It may run up to 30 per cent of his words which is a burden of entirely too many new words for him to be understood. If he confines himself to a 2000 word vocabulary and tries to avoid the purist Hindi words, he will be understood without any difficulty.

If the literature from which both word counts were made was rather purist Urdu and purist Hindi, then the commonly used language in the greater part of the Hindi Urdu area may be assumed to be much more a mixture of Urdu and Hindi than comparison of the two word lists suggests. This would mean that all our figures should be revised in the direction of showing greater similarity (if the allegation is true that the written language from which the word counts were made is more purist than the spoken language in all but the extreme western and eastern parts of the Urdu Hindi area). But do the word lists represent the language of the purists? The Hindi list cannot be

accused of this. Perhaps the following list of Urdu-Hindi equivalents will illustrate the amount of Urdu:

*Pita* (father) appears  $2\frac{1}{2}$  times as often as *baap*.

*Sahayata* (help) appears  $3\frac{1}{2}$  times as often as *madad*.

*Parantu* (but) appears 5 times as often as *lekin*.

*Putr* (son) appears 5 times as often as *beta*.

*Or* (direction) appears  $7\frac{1}{2}$  times as often as *taraf*.

*Karan* (cause) appears 26 times as often as *sabab*.

*Samay* (time) appears 30 times as often as *wakt*.

But not one of the above Hindi words of which the Urdu equivalent is used so freely in the Hindi list occurs in Urdu list. Neither do such common Hindi words as *dhoti*, *gari*, *stan*, and *adhik*. The Hindi list can certainly accuse the Urdu list as being the more snobbish of the two. There is less Sanskrit in the Urdu list than Arabic and Persian in the Hindi list. Probably in very little of the Urdu area is more purist Urdu spoken. On the whole it can be maintained that spoken language is rather generally more nearly Hindustanee than the literature from which the lists were made. Throughout the U.P. it is very considerably more. Even in the Central Provinces there is more Urdu used than the Hindi list gives us. This is a matter of opinion rather than proven fact.

There is considerable shifting of the position of words in the lists of the two languages. Frequently used words that are common enough to get into the first Urdu 1000 are only common enough in Hindi to get into third 1000. This shifting of the relative importance of words in the two different languages may be interesting to the students of language.

There were 81 English words in the Urdu list but only 42 in the Hindi list. Is Urdu more tolerant to English words than Hindi? Only 21 of the English words are common to both word lists.

## In Conclusion.

There is little revealed in this statistical analysis of the vocabulary of Urdu and Hindi that was not suspected by students of these two languages previously but the analysis brings comparatively reliable information and reduces mere guess-work.

It is shown that Hindi and Urdu, even in more or less pure form, share a very high percentage of the commonest words

# INTELLIGENCE AND ITS MEASUREMENT<sup>1</sup>

BY

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## II. MEASUREMENT OF INTELLIGENCE

Having considered the nature of intelligence, we next pass on to its measurement. Attempts to assess a person's intellectual ability are not new. At all times we notice people devising some methods of discovering individual differences in capacity. We read in legends and folklores how solution of intelligent problems served the basis for the choice of rulers and ministers for a certain kingdom; or how a princess selected from among her suitors one who could unravel the skein of a certain riddle. But these methods, though sometimes they worked quite well, were crude, unscientific and purely subjective. Attempts were made, therefore, to discover some objective standards on the basis of individual differences in physical structure and in sensory and motor functions. Thus we find the physiognomist trying to correlate intellectual traits with the form and structure of the face. Lavator, for example, supposed the face to be the index of a man's abilities. Again the phrenologist, like Gall and Lombroso, compared a man's intelligence to the formation and measurement of his head. Thus Gall claimed to predict a man's intellectual and moral qualities from the size and shape of his skull. Later we find attempts to correlate intelligence with sensory acuity. Individuals capable of fine sensory discriminations were supposed to be of superior mental capacity. Again, motor dexterity and quickness of motor reaction were held to be the indicators of greater intellectual power. But all these attempts were based on unscientific generalisations and hence could not stand the rigour of scientific verification. It was only in the year 1905 that Binet, a French psychologist, for the first time devised a 'metric scale of intelligence.' He prepared a series of questions drawn from the practical situations of everyday life and made an extensive application of these on a large

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<sup>1</sup> *Note.*—The first article of the series appeared in the September issue.



number of children of different ages to see just how many the average normal child of each age could answer. In this way he arrived at his concept of mental age—a very important contribution to applied psychology—which he assigned to a boy if he could pass the questions passed by the average boy of that age, whatever his actual age might be. Later, Stern used the mental age for calculating the 'I Q' or 'intelligence quotient' of an individual, which is the percentage that his mental age is of his chronological age. Thus a boy having a mental age of 12 and chronological age of 10, will have an I Q of 120, and a boy having the mental age of 8 and chronological age of 10, will have an I Q of 80. The average boy for an age will have his I Q approximating to 100, his mental and historical ages being equal. Binet's scale included tests of comprehension, memory, judgment, ability to detect absurdities and resist foolish suggestions, and so on. A small number of tests were selected for each age, which were to be solved within a fixed time limit. The tests could be given to individual testees separately and hence called 'individual tests'. Binet's scale soon received a popular acceptance in numerous countries. Different revisions of the scale were made to suit local conditions, though the scale remained the same in its essentials. Popular among the revisions are Terman's scale<sup>2</sup> in America and Cyril Burt in England<sup>3</sup>.

Binet's scale, though supplying a successful measure of individual differences in capacity, suffered from the lack of a sound theoretical basis. His method was in the main that suggested by Galton some years before "to obtain a general knowledge of the capacities of men by sinking shafts, as it were, at a few critical points"<sup>4</sup>. Binet proceeded to sink shafts not at a few critical points but at a multitude of points and computed an average. This was the only theory behind his work, if this could at all be termed a theory. Besides, there are many other defects in Binet's tests, and consequently in all its subsequent revisions, which have been aptly summarised by Catell in the following manner —

"1. That its component test items are frequently tests of scholastic attainments and life experience, rather than of 'g'. The test items have never been validated by statistical treatment except in a few instances, and in these instances the 'g' saturation has been regrettably low.

<sup>2</sup> Terman, L. M., *The Measurement of Intelligence*

<sup>3</sup> Burt C. *Mental and Scholastic Tests*

<sup>4</sup> Verbal Factor

"2. The test items are too few in number to give good reliability and fine grading.

"3. It is inadequate at the higher mental ages.

"4. Certain special factors play a rather large part in contributing to the total score, e.g., 'the practical ability' of Alexander's research; 'v'<sup>5</sup> and almost certainly the 'f' factor of 'fluency of association' which is a matter of temperament rather than of cognitive ability.

"5. That if, as most clinical psychologists concede, test is not concerned with any one ability but a collection of abilities, the attachment of a single quantitative value to this hodgepodge is meaningless.

"6. That in consequence of the contamination of 'g' with scholastic attainment, the Binet does not give a scatter of intelligence quotients as wide as that which actually exists. For example, a child of ten with a mental age of six scores more highly than a normal child with an actual age of six. This leads to wrong conceptions of what I.Q.'s are to be regarded as high or feeble-minded intelligence levels.

"7. The personal relationship that arises between tester and testee in this kind of test, and which is sometimes claimed to give greater reliability, is just as likely, in comparison with the impersonal group test situation, to introduce errors arising from shyness and other temperamental variations in the child, as to improve the reliability of the score. Furthermore the examiner is also likely to be misled by unconscious attractions and hostilities and by the appearance and conduct of the child, for many items are such as cannot be scored with entire objectivity."<sup>6</sup>

The defects of the Binet Tests have created a bias in psychologists for the group tests. Apart from theoretical considerations, the group tests have a great practical advantage, since they save much time and labour by measuring a sufficiently large number of subjects at one time. The group tests were first constructed for an extensive application of intelligence tests to the American Army.<sup>7</sup> The army tests were soon followed by a large number of similar tests prepared for use in different places.

<sup>5</sup> Galton, F., Remarks on Mental Tests and Measurements, *Mind*, Vol. 15, 1890.

<sup>6</sup> Catell, R. B., Measurement *Versus* Intuition in Applied Psychology, *Character and Personality*, December, 1937.

<sup>7</sup> Yoakum, C. S., and Yerkes, R. M., Army Mental Tests.

A detailed list and description of some of the notable group tests has been supplied by Raymond Catell<sup>\*</sup>

Some typical examples of the group tests are the following:—

- 1    Synonyms    Antonyms    Empty—Vacant    .    Same  
        —Opposite    Submit oneself—Cease resistance  
                      Same—Opposite.

Here two words are given and the subject has to find, by underlining 'same' or 'opposite,' whether the two are synonyms or antonyms

- 2    Best Answer    The saying, "A carpenter should  
                              stick to his bench," means  
        Carpenters should not work without benches  
        Carpenters should not be idle  
        One should work at the thing he can do best

Here three answers are suggested to a question    The subject has to underline the best answer

- 3    Analogy.    Prisoner is to jail as water is to—  
                      Prison?    Drink?    Tap?    Bucket?

The subject has to select and underline the word which is related to the third word as the second is to first

- 4    Completion    We took advantage of our new—  
                              Opinion?    Position?    Need?    Demand?

The subject has to underline the word which completes the sentence best

- 5    Classification    Hard, Rough, Smooth, Soft, Sweet

The subject has to underline the word which does not belong to the class to which all the other words belong

- 6    Logical Selection    Bird (bones, eggs, beak, nest,  
                                      song)

Here the subject has to underline the two words which signify the two things which a bird always has

- 7    Inferences    If I can run faster than Tom and just  
                              as fast as Harry, but slower than Dick, who will  
                              win the race? Tom? Dick? Harry? or I?

The subject has to select and underline the correct answer

<sup>\*</sup> Catell R B A Guide to Mental Testing

The Binet tests, as we have already seen, were based on arbitrary selection of questions appearing to measure intelligence. Some of the old individual as well as group tests were similarly based on mere random selection of apparently intelligent tests. This defect has now been removed by the discovery of statistical techniques for estimating the value and reliability of tests. Since the confirmation of Spearman's Two Factor Theory, a good test of intelligence is one which correlates very highly with 'g' and has only a small specific 's'. Besides this general criterion, other specific ones may also be usefully stated:—

1. A good battery of intelligence tests should have questions graded in increasing order of difficulty. Statistical methods for grading tests in equal units of difficulty have been devised.<sup>9</sup>

2. A good test must be reliable, i.e., should give the same result when applied at different times and by different persons. Three methods are in use for determining the reliability of a test or, more technically, for discovering the test's "reliability coefficient."

(a) *Repetition of the tests.*—Applying the same tests to the same group after an interval of time and then computing the correlation between the scores yielded by the two applications supply a measure of the reliability of the tests.

(b) *Use of parallel forms of the tests.*—This requires the construction of parallel forms of tests which are applied to the same group at different times. The correlation between the two forms is taken as a measure of reliability.

(c) *The split-half method.*—In the split-half method the test is broken up in two equivalent parts, usually one consisting of the odd numbers and the other of the even numbers. The scores are then separately calculated and their correlations computed. From the half-test reliability the self-correlation of the whole is easily estimated.

Of these three methods the last one is most frequently used. The first one requires a sufficient time interval between the two applications of the same tests so that the influence of familiarity

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<sup>9</sup> Garrett, H. E., *Statistics in Psychology and Education*,

with the tests may be eliminated. Moreover, the repetition of the self same test, as the writer's experience goes, causes a decline of the testees' interest in the testing operation. The second method requires the preparation of duplicate forms of equal difficulty, which is by itself an arduous task.

3. A good test must be valid. "The validity of a test depends upon the fidelity with which it measures whatever it purports to measure."<sup>10</sup> To determine the validity of a test, it must be compared with some independent criterion of assessing intellectual ability. Usually intelligence test results are correlated with school examination results or with imputed intelligence based on the class teacher's estimate. A high positive correlation between the test and its criterion may be taken as evidence of validity, provided both the test and its criterion are reliable. But neither the essay type of examination nor the subjective impression of class teachers are themselves reliable methods of assessing ability. The Hartog Committee in the course of an investigation of examinations has shown that the agreement between different examiners in allotting marks to the same answers as well as that between the marks allotted by same examiners to the same papers at different times, are surprisingly low.<sup>11</sup> Similarly Magson has shown, on the basis of an elaborate experiment, that the highest correlation between personal estimates of different judges comes only to .53.<sup>12</sup>

Another indirect method of measuring the validity of a test is to combine the scores of each testee on the different subtests, compute the average for each composite score, and then compare the order in each subtest with the order in the average of all. The test which correlates highly with the average of all is a valid test of the ability which the scale purports to measure.

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HARRY LEIGH BAKER, Director of Guidance, Simmons College. "High school teachers know less than a fourth of the facts about their pupils which educators, guidance specialists, and psychologists consider of importance in the educational treatment of individual children."

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<sup>10</sup> Garret H. E. *Statistics in Psychology and Education*

<sup>11</sup> Hartog P. E. and Rhodes E. C., *An Examination of Examinations*

<sup>12</sup> Magson E. H. *How We Judge Intelligence*

## BRITISH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

*(A Summary of Papers and Discussions abridged from the Scottish Education Journal and The Schoolmaster and Woman Teachers' Chronicle)*

### The Presidential Address.

In his presidential address to the British Association for the Advancement of Science at the opening meeting at Cambridge, on 17th August, Lord Rayleigh discussed a question which has been before the public on more than one occasion of late—the use and misuse of scientific discoveries. Lord Rayleigh maintained that the man of science must follow where his researches lead him. So deeply within him was the urge to explore the unknown that he would not be deterred by the chance that the knowledge which he had bestowed upon mankind would be put to frightful and degrading uses.

He suggested that the application of fundamental discoveries in science to purposes of war was altogether too remote for it to be possible to control such discoveries at the source. The world, he said, is ready to accept the gifts of science and to use them for its own purposes. It is difficult to see any sign that it is ready to accept the advice of scientific men as to what those uses should be.

During the Great War itself few scientific men in any country doubted that it was their duty to do what they could to apply their specialised knowledge to the purpose of war. Nor was it often suggested by publicists that there was any countervailing consideration. On the contrary, they urged strongly that our resources in that direction should be efficiently mobilised. It was chiefly in vague general discussions that the opposite view became vocal.

In answer to those who urged that science was the cause of all the trouble, and that therefore they might look to the scientists for some constructive contribution to finding a remedy, Lord Rayleigh said it was worth while to inquire what basis there was for this indictment, and whether, in fact, it was feasible for men of science to desist from labours which might have a disastrous outcome, or, at any rate, to help in guiding other men to use and not to abuse the fruits of those labours. He confessed that he had no sanguine contribution to make. He believed that the whole idea that scientific men were specially responsible was a delusion, born of imperfect knowledge of the real course of the process of discovery.

### Education.

At the Section of Educational Science, Sir Richard Gregory and Mr. H. G. Wells presented the report of a committee appointed as a result of the presidential address given by Mr. Wells last year. "to consider and report on the gaps in the informative content of education with special reference to the curriculum of schools."

The committee prepared an analysis of the curriculum suggested by Mr Wells and an attempt was made to relate the proposals to the actual conditions of school organization. Copies of the analysis and a *questionnaire* were then submitted to a number of head teachers in elementary schools and the headmasters of six preparatory schools. Later the inquiry was extended to 21 secondary schools but replies were received from only four boys' schools and five girls' schools. Summarizing the results of the *questionnaire* the report stated that the two features which called for comment were as follows —

- 1 The consensus of opinion that the informative content of education outlined by Mr Wells is both too wide in scope to be covered during the present school life of the great majority of children of this country, and too advanced in its demand upon the capacity of the pupils for whom the various sections of the subjects were suggested.
- 2 The differences of opinion in relation to what can be included in the curriculum, what some correspondents believe can not be taken with pupils of a given age group and cannot be included within the scope of a reasonable curriculum is actually taken in other schools with pupils of the same age.

In reference to the first the committee submitted that the phraseology used by Mr Wells was most suitable for the audience on the occasion of delivery, but it was not always appropriate for use in schemes of work for elementary or secondary schools. One correspondent wrote, "Some of the phrases are rather staggering for a school curriculum but they probably mean less than they appear to mean."

"States of matter" for infants had a terrifying sound but talks on ice water and air in some form or other, and in association with some experience or activity were taken in every school. Biology, zoology, botany and physiology mentioned in any curriculum for very young children would immediately arouse suspicion if not antagonism, yet it was doubtful whether the whole of Mr Wells' suggestions were not included in nature talks, observation records, gardening and such like normal activities of nearly every infants' school in the country.

Sir Richard Gregory moved the adoption of the report. He said that generally it had been found that a good deal of what Mr Wells proposed and what certain sections of the educational Press and others had disputed, was being given in the schools, but was not actually labelled in the same way as by Mr Wells.

Mr H G Wells, who seconded, said that what had been done so far was to take a first sample of what was going on in various schools. He had been struck by the attitude of teachers to what he had thought was almost the primary design of teaching—to give the child or future citizen a picture of the world into which he was going. On the whole teachers seemed to be astonished by that suggestion.

The underlying response to the inquiries made he thought, was "We do not teach anything definite. Teaching is the important thing and not what is taught." This seemed to him curious. It impressed

him that from 26 elementary schools they got replies only from 13, while the secondary schools seemed so foreign to the idea of making a statement as to what they were teaching that 12 out of 21 made no reply at all. He suggested that they were stunned by the idea that the young student had to emerge from school with a definite vision of the world into which he was going.

He was not, he added, hostile to and critical of teachers. He thought the teacher at the present time was in an extraordinary position. The main aim of the British Association was to consider science in a changing world. They had to consider education in a changing world. Education in the past, however, took no notice whatever of changes. The tradition of education had been that it was a conservative force, a force for the preservation of a society established and permanent. The original idea was to take a youngster and say, "This is the law. It is all settled. You take your place in life and behave according to these rules." Now we were discovering that we lived not in a stable world but a world which continued to change with great rapidity and in which education had to be a preparation to deal with changing conditions.

The teacher with all his difficulties, such as insufficiency of resources, was confronted with the riddle as to whether he was making a world or sustaining a world already made. He had to ask himself whether he was really trying to pickle an old world, trying to create a new one, or was a propagandist of a new dogma to replace an old one.

### School Buildings.

Discussing "Tendencies in the design of schools," Mr. S. E. Urwin, county architect, Cambridge, said that the child must be taught to appreciate beautiful things and good design not only in buildings but in the common every-day things of life. They should be taught at the beginning of their lives to respect all property and things as their own.

Some of the worst slums in the country, he considered, existed in some of our old school buildings. Gaunt, uninteresting, prison-like buildings, surrounded by tarmacadam, high walls, and unclimbable spiked iron railings, were a thing of the past and must never be repeated. Every school should be surrounded by trees, green grass, shrubs, and flower borders, and every classroom should be so arranged that it looked out on such a scene.

### The Problem Child.

Mr. R. Knight, director of the Department of Psychology in the University of Aberdeen, spoke on "The Background of the Problem Child"—the child with some disorder of thought or behaviour, which unaided commonsense could not remove—such as nervousness, psychological lying, or stammering. The principal cause of subnormality in a child was unsatisfactory home environment, whether in producing the merely spoilt child or in producing the mental or physical inefficient. The bad effects of parental discord, which robbed the child of a settled background and forced on him a conflict of loyalties were constantly seen.



Jealousy between the children of the same home was another source of trouble. A girl of 12 was so envious of the constant attention and special privileges given to an older sister who was asthmatic that she herself developed psychogenic asthma, which only disappeared when the parents, being informed, ceased to preoccupy themselves too much with the older girl. A boy of 11, in spite of proved ability, fell back at school because of unfavourable comparisons with a younger brother. A boy of four developed a stammer in resentment at the appearance of a baby sister, and this only yielded when the father gave the child his undivided attention away from home over a week end.

Excessive or capricious discipline produces bad effects, but it was nonsense to assert as a few eccentric schoolmasters and amateur educationalists did that children should have no discipline at all, but be given absolute freedom to develop as they will. Children left to themselves no more became civilised adults than fields left to themselves became gardens.

### Choosing a Career

The value of scientific guidance in the choice of a vocation was urged by Mr J G W Davies, vocational adviser National Institute of Industrial Psychology, in discussing 'The place of interest in vocational adjustment'. He defined a satisfactory state of vocational adjustment as one in which a person finds in his occupation a sufficient outlet for his abilities, interests and disposition characteristics, and who feels that he compares adequately with his competitors in efficiency and who knows that within the terms of his own expectations he is holding his own as an economic unit. The misfits of life on the other hand, would usually say they were "not interested" in their work. More often than not these people were projecting on to their work some of their own emotional problems.

### Local Education Authorities

Speaking on 'The proper function of administration in public education' Mr John Sargent Director of Education for the County of Essex, expressed a belief that the minimum size of any local government unit should be an area with a population of 250 000.

Mr Sargent said that until a hundred years ago the main interest of government was to restrain men from living evil lives, since then the intention however mysterious in operation had been to help them to live good ones. The obvious result of this evolution from a negative to a positive view of the function of government had been a vastly increased interference by the State in the goings and comings of the ordinary citizen.

The personnel of the local education authorities was divided into the amateur and the professional elements. The most serious aspect of the problem was the steady and even accelerating deterioration in the amateur personnel which had taken place since the War. This was particularly marked in the case of the elected representatives of the people owing to the gap caused by the War in the ranks of those who, if they had survived would probably have been the first to offer them

selves for public service, and also to the fact that the vast increase in the responsibilities laid upon local authorities by legislation made it necessary that any member who was to become really *au fait* with the business of education should be able to devote a considerable amount of his weekly time to it. There was an increasing tendency of education authorities to consist of people who had retired from work, or had never had work, or who were in fact professionals rather than amateurs because, as officials of political or other associations, it was expedient for them to become members of the education authorities from the point of view of promoting the objects which their associations had at heart.

"It is no reflection," he said, "on the personal integrity of these last to express the opinion that they constitute a serious danger to the system on the ground that if there is a bureaucratic habit of mind, and if as some people believe it is inimical to good government, these people possess it and bring it to bear on their consideration of educational problems without the saving grace of the professional educationalist's training in and knowledge of the particular branch of administration with which he is dealing. There remain, of course, many splendid people who give their services to educational administration, and I must safeguard myself against appearing to suggest by the use of the word deterioration that graft or other forms of dishonesty are on the increase. That, I am glad to say, has not been my experience. There is the risk, however, which is more than theoretical, of intellectual dishonesty creeping into discussion of educational affairs when the authority contains any substantial number of members who are pledged to a set of opinions which may have a cross-bearing on purely educational consideration."

Indicating possible remedies for difficulties in the local government system, Mr. Sargent said he had come to the conclusion that for education authorities, and he believed for other authorities also, the minimum size of any local government unit should be an area with a population of 250,000: the ideal size would be between 500,000 and 750,000, and the maximum size of 1,000,000. This would pre-suppose the abolition or amalgamation of authorities, and in this connection the question was worth consideration of so redistributing areas that none of them might in future be exclusively rural or exclusively urban.

### Educating for Democracy.

Opening the discussion on "Education for a Changing Society" at the British Association, Mr. W. H. Robinson said that the essential function of the school in this changing society is to teach pupils the art of self-education to be continued through life, so that they may attempt consciously to control, rather than to be controlled by, the sum total of their environment. "We have abundant evidence," he said, "that as a course of science will not necessarily produce a scientific thinker, so an imposed 'training' or 'course of instruction,' however carefully devised, will not necessarily result in real 'education.'" The great need appears to be for the development of a technique by means of which there is developed the active co-operation of the pupil in this work of self-education. "What are the essentials for which the education of the people of England should stand?" he asked. "When we have taught our pupils how to read, and how to find information, when we have

supplemented what they are daily learning from newspapers, cinemas and broadcasts, we must still remember as educationists, that the same facts mean different things to Mussolini, Hitler, Mr Chamberlain and Mr Anthony Eden. If Mr Chamberlain and Mr Anthony Eden differ in their interpretation of the meaning of the facts, Parliament and through them the people, will ultimately decide. This is the keynote of our national life and is the starting point for a conception of national education which will preserve and develop all that this implies. For centuries in this country the 'common man' has been learning by daily practice and experience how to make democracy 'work,' and as a result even to day 'the rights of minorities are respected and men are free so long as they infringe no other man's rights, to say and think what they like, even when it runs directly contrary to the view of the majority or the government'."

"Is it too much to claim that the modern child of 14-15 who has hitherto been a wage earner, is as much able to take part in the working of his school community as his humble progenitor—who could neither read nor write, and who had not, like he has grown up in a world of cinema, broadcast and print—were able to manage the affairs of the village which was untouched by the motor bus? These pupils, with their adolescent psychology will become the leaders of the school community. They will get their experience of life through the organisation of school activities—sport, societies, dramatic work, 'projects,' etc.—and by discussion and the necessary attempts at agreement they will learn by experience the basic facts on which our democracy is built and along which it must develop. This learning through experience will be more important than traditional school 'lessons.' It should be an integral part of their education, not something to be squeezed into odd moments left over from education proper but regarded as itself, the very stuff of education. The pupils must 'learn by doing', their education must be 'practical' but the raw material of the doing is not subject or wood, or clay, or raffia but carefully organised experience, discussion and attempting to make their little democracy 'work'."

"There must be an emphasis," he continued "amounting almost to an obsession, in all our work, in the direction of securing the willing and active co-operation of the pupil in a process of self education for life in a democratic community. This immediately shifts the emphasis in every aspect of our work. No longer shall we assume that our carefully devised courses of study will in themselves produce even indirectly as a by-product, certain attitudes of mind and certain mental and intellectual qualities but rather shall we set out to produce these attitudes of mind and these intellectual qualities using our timetables and curricula and courses of study and 'practical' work and teaching and learning techniques, as the means to our end and not the end in themselves. The ideal teacher would be a Socrates who, instead of overmuch teaching would lead them constantly to realise the inadequacy of much current thinking about the impressions coming through the education of environment and who would lead them by discussion about the routine matters of their school community organisations to develop the essentials of the democratic spirit."

Miss Ruth Dawson Headmistress of a new Senior Girls' School in Middlesbrough made an interesting contribution to the subject. She

showed how the modern child was brought up in an environment of rapid change, of speed and noise, of soul-destroying mass production, with a wireless background and a cheap cinema habit. The entrants to the new reorganised schools were the competitive left-overs and ranged from the disappointed children, who were little if any inferior to some of the successful ones, to children of low ability. On entry to a new experience in a school they had to be classified, the usual classification being A, B and C streams. Miss Dawson said that she found the majority of children not unduly disturbed by being in the C stream. Although some of the supersensitive ones might feel aggrieved; in her school she had periodic movements from group to group. The aims of the senior school should be to form and strengthen character, to train tastes which will fill and dignify leisure and to awaken and guide intelligence. One of the most interesting parts of Miss Dawson's paper dealt with her translation of these aims into the actual curricula and timetable. The science course was closely linked with every-day life and had a slight biological bias: domestic science included each week a day on which the girls prepared and ate the meal at school. Music, rhythm work, dramatic work, arts and crafts, needlework were taken as important parts of the curriculum and not relegated to odd periods. In mathematics all processes were banished except those which would be used in after life. The language work was closely linked with the dramatic work and the school aimed at good speech, clarity of expression and love of literature and poetry. A few of the more capable girls proceeded to a foreign language. Physical fitness did not try to make every girl able to swing a hockey stick or swim a mile, but have that muscular control which resulted in poise.

Dr. Freeman, Headmaster of Winchester, gave a most invigorating and challenging paper. He claimed that in spite of changes in the externals of society man remained fundamentally much the same. He made a strong plea for training in discipline and the desirability for accuracy. There was a danger of things being made too easy and in life many disagreeable tasks had to be faced. The desire of many parents to give their boys a better chance in life too often resulted in them having more independence, but less ability to stand up to hard knocks. Hence he was a firm believer in the value of a classical education, a thorough grounding in English grammar and in Euclidian geometry. He admitted that certain changes in society called for changes in content and method in such subjects as Divinity, Biology (including matters concerning sex, heredity, etc.), Civics and Physical Training. He felt that there was a real interest in religion to-day and that much good work could be done showing how the Bible had been obtained, its value as a source of literature and history. The Biology course included lessons dealing in a cold scientific manner with sex and its problems, and Dr. Freeman said that he invariably found parents, grateful for this work. He was convinced of the value in Secondary Schools of the O.T.C. and felt that it was impossible to make the British boy militaristic. It provided an admirable way of training the sense of responsibility, giving self-confidence and the ability to listen to and carry out an order correctly. The value of a longer school life far outweighed any temporary advantage gained by leaving at 16, as life became more complicated so man required a longer period of preparation for that life.

Miss Muriel Davies, of the Streatham Secondary School, gave a paper which dealt with this problem in a distinctive manner, and she was listened to with tremendous interest. She said that with the "shrinkage" of the world people were in closer contact with each other, not only between country and country, but between class and class. For many years the working classes had a strong desire for wrongs to be righted, and although much had been done much still remained to be done. She challenged the statement that the education ladder was open and free to all and claimed that the educational system was built up on lines of class distinction. The bulk of the working people were educated in the Elementary Schools, and when the brighter children did proceed to Secondary Schools, too often they proved to be recruits to the middle class, so leaving the lower class without leaders. She claimed that there should be a unified system of education with many diverse types of schools, but that children of all classes should mix freely from the earliest entry to the schools. Throughout our schools to day was the spirit of competition, an individual fight for prizes, marks, scholarships and eventually posts. Instead there should be the spirit of co-operation and the working together for the good of the community.

## INTERNATIONAL EDUCATIONAL NEWS

### I. The International Conference on Home Education.

The next international conference on home education will probably be held in Rome in 1941. At the meeting of the international commission in Paris, on 7 July last, it was decided to organise 4 sections showing the part played by: 1) science; 2) parents; 3) the school; 4) organisations, wireless, the cinema and the press. Particulars from: Mlle. De Vuyst, 22 avenue de l'Yser, Brussels.

—*Bulletin of The International Bureau of Education.*

### II. Teachers and World Peace.

*International Conference of Teachers Convened by the Education Committee of the League of Nations Union.*

This Conference took place in London, April 21st to 25th, 1938. The Public Opening Session was held at University College (University of London) Gower Street, W.C.1. under the chairmanship of Dr. Gilbert Murray, D.C.L., LL.D., D.Litt. A number of states, which would normally have been represented, were unable to send delegates "owing to the unsettled conditions existing there," a somewhat startling proof of the need for the activities of the League of Nations.

The Rt. Hon. Viscount Cecil of Chelwood delivered a speech unanswerable in its appeal for a strong united international effort to remove the causes of the present world unrest, and pointing to the work of teachers in the schools as a pregnant field of activities towards this end. He was followed in similar strain by Mr. C. W. H. Weaver representing the Director of the International Labour Office, Mr. C. H. Kullmann representing the Secretary General of the League of Nations, and M. Eugène Cossard who spoke for the International Federation of Secondary Teachers.

Subsequent sessions were held at the London School of Economics, and the subjects: "The Present International Situation," and "The Teaching of International Relations in Schools," produced interesting points of view. There was complete unanimity regarding the importance and necessity for the teaching profession to contribute towards a better understanding between nations, and of the unique opportunities which it possessed in this connection. The methods by which this might be accomplished were not easy to define. It was obvious that the work was closely associated with the Training of Teachers and also with the practical training for World Citizenship which could be carried out in the schools.

In the course of the Conference, a Public Lecture was given by Mr. H. G. Wells, his subject being: "The Poison Called History."

—*Head Teachers' Review.*

### III Association of University Teachers

The Forty fifth Council Meeting was held at the Medical College of St Bartholomew's Hospital, London, on Friday, 10th December, 1937. Fifty four voting representatives were present and one without vote.

The President, Professor H B Charlton, delivered his Address. In the course of the Report of the Executive Committee it was intimated that a donation of £10 10s 0d had been given to the Chinese Universities Relief Fund. This action was confirmed.

Mr MacInnes reported that, owing to the illness of Professor Stanley Lewis, he had taken over the arrangements for the visit to Scandinavian Universities, which had duly taken place in September 1937.

The Convener of the Salaries and Grading Committee (Professor Brodetky) brought the Committee's report on the salaries of university teachers before the meeting for preliminary discussion prior to its being sent to the Local Associations for further discussion and report back to Council. He also reported that an analysis had been made of the fifty returns received from graduate members of Library Staffs, together with a graph showing relation between salary and length of service, and it was agreed that these be communicated to the Secretary of the Salaries Committee of the University and Research Section of the Library Association.

The Convener of the Superannuation Committee (Assistant Professor Taverner) intimated that the Memorandum on Insurance Conditions under the FSSU had been adopted for printing and distributing to all members and that inquiries were being made regarding the question of representation of the Association upon the Council of the FSSU, and also into the question of Permanent Disability Insurance.

The Hon General Secretary intimated that a letter advocating Book Purchasing Schemes for Students had been drawn up by the Committee on Student Affairs and sent to the Standing Committee of Vice Chancellors and Principals.

The Convener of the International University Conference Committee (Professor McLean) intimated that the next International Conference would be in Switzerland in 1938. It was suggested that the Conference should confine itself to the discussion of one topic namely, Student Health and Student Health Services, divided into three sessions (i) International Students' Sanatorium at Leyman, (ii) Health Insurance and Medical Care Schemes (iii) Physical Training, experts would speak at each session. In regard to finance he intimated that he considered £20 from each supporting Association would provide the necessary funds, and Council agreed to subscribe an amount up to £20 for the current expenses of the Conference.

In view of the present effort of the National Central Library to improve its finances Council agreed to subscribe an annual sum of £10 to the Library Committee, with permission to contribute a like amount to the National Central Library in view of the very important services under the Library Co-operation Scheme rendered by it to members of the Association.

The election of the nine elected members of the Executive Committee was proceeded with. Miss T. J. Dillon and Mr. J. G. Garrett were elected to serve on the Panel for Nomination of President and Vice-Presidents for 1938-39.

A Dinner was held at the London (R.F.H.) School of Medicine for Women on the evening of the 10th December, at which the Dean (Dr. E. Bolton) and Professor Amy Fleming were the chief guests of the Association.

An Enquiry Office has been opened which will endeavour to discover for research workers in what Library (if any) any publication or manuscript is available, and whether such publication or manuscript would be lent temporarily on the application of a librarian. Enquiries should be addressed to the Information Department, National Central Library, Malet Place, London, W.C.1. and *should be accompanied by a list of the libraries which the enquirer has already tried in vain.* For the present no fee will be charged for this service.

The Enquiry Office is also prepared to deal with enquiries not only for publications required by individuals for research, but also for available (e.g., duplicate) parts of periodicals, required by Librarians for completing sets of collections.

—*The Universities Review.*

#### IV. The International Bureau of Education.

##### THE QUESTIONNAIRE ON INQUIRY ON THE TEACHING OF GEOGRAPHY IN SECONDARY SCHOOLS

###### I. *Frequency of, this Subject*

1. In what sections or divisions of secondary schools proper, i.e., of schools leading to the universities (high schools, grammar schools, etc.) is geography taught?

2. In which school years of the various secondary schools proper is geography taught?

3. How many hours per week are devoted to geography in the different sections (and in each class) of secondary schools proper?

4. Is geography sometimes an optional subject? If so, kindly state in what circumstances.

5. In which classes is geography of the homeland taught and in which classes geography of foreign lands?

###### II. *Importance of this Subject*

6. What importance is accorded to geography:

(a) in term examinations (promotion tests)?

(b) in the secondary school leaving examinations?



7 Have any modifications been introduced recently affecting the importance accorded to geography as a subject in the secondary school proper, or are any such modifications contemplated?

### III *Aim of Geography Teaching*

8 Are there any official instructions (decrees, regulations, etc) assigning specific aims to the teaching of geography in secondary schools proper (practical aim general culture, better knowledge of foreign countries and understanding of foreign nations, etc)?

### IV *Curricula*

9 Kindly indicate very briefly what are the principal questions figuring in the geography syllabus of each class

10 Does the curriculum lay the major stress on physical geography, human geography or economic geography?

### V *Orientation and Methods of Geography Teaching*

11 Are there any official instructions concerning the orientation of the teaching of geography and the methods used?

For example are teachers required to lay the stress on descriptive teaching, or rather on the scientific causes of geographical facts?

12 Are teachers required to link the teaching of geography with that of the sciences (botany geology, co-mography, etc)?

Are they required to correlate their teaching with other subjects, such as history, civics etc?

13 Do the official instructions recommend the use of special methods, such as individual research work, regional surveys made by groups of pupils, international school correspondence, documentary, individual or collective etc?

14 Are there official regulations showing a tendency either to increase or decrease the requirements regarding knowledge of geographical names?

### VI *Aids to Teaching*

15 What are the official instructions with regard to

(a) the equipment of special rooms for the teaching of geography?

(b) the selection of text books?

(c) the use by the pupils of reference books and reviews from the school library?

(d) the provision and use of maps, films, globes, collections of photographs and other material?

16 Do the official instructions recommend study tours to be undertaken with groups of pupils

(a) in the homeland?

(b) in foreign countries?

Are grants allowed for this purpose?

### VII. *Teachers of Geography*

17. What specialised training is given to secondary school teachers of geography? What degrees or diplomas are required?

18. Can geography teachers be required to teach other subjects and, if so, which? For example, is it usual for history and geography to be taught by the same person?

19. What means are provided for the in-service further training of geography teachers (exchanges of teachers, summer schools, travelling scholarships, etc.)?

20. Are there, in connection with the universities of your country, summer schools serving as refresher courses for geography teachers from foreign countries? Are tours organised in your country that may be of service to such teachers?

—*Bulletin of The International Bureau of Education.*

### V. *Eighteenth International Congress of Secondary Education in Paris*

#### Conclusions.

The members of the I. F. A. S. T., assembled in Congress in Paris from August 2nd to 6th, desire once more to declare that it is necessary for Secondary Education to maintain its independence, as an essential condition of its efficiency.

They declare that an education of freedom based on reason and respect for truth is the soundest foundation for the education of the social sense, because it leads to a discipline accepted voluntarily.

It is the duty of Secondary Education, at the risk of failing in its task, to train the social sense in the children committed to its charge. It contributes thereto by its function of intellectual training, which provides society with an élite possessing accurate and open minds; it ought to help further by using school life as an apprenticeship for the pupils to corporate life: it can collaborate in a very beneficial manner in the out-of-school activities used for social training.

In order to fulfil this function it is important:

- (a) To preserve in our secondary education its living spirit and its formative and cultural aims;
- (b) To encourage in study, in corporate life and in games all forms of collaboration, of voluntary subordination and of personal responsibility (team-work, clubs, pupils' debating societies, social work carried on by groups of pupils, magazines, etc.).

In order to carry out these functions, still imperfectly fulfilled, the International Congress of Secondary Education requests the Officers of the I. F. A. S. T. to facilitate the work of the national associations by informing them of the methods in use in different countries. In this way

they will each be encouraged to take steps appropriate to their respective temperaments and conditions since all nations are seeking the same goal but by many paths

The Congress, declaring that in the majority of countries the training of the social sense is incomplete and that in many cases it does not exist, resolves

That the associations work together to formulate a practical scheme for this education and to study in what manner teachers may best be prepared to fulfil their rôle of social educators, having due regard to their own individuality "

—*Bulletin of I F A S T*

## VI Annual Conference of International Federation of Teacher's Associations

*Copenhagen, July 21st—24th, 1938*

### FIRST QUESTION

#### International Exchange of Teachers and Pupils

The practice of international exchange of teachers and pupils which, in the course of the first ten years following the war, was organised on a vast scale experienced considerable regress in recent times

Depression weighed heavily on the exchange idea on the one hand governments, local offices and associations interested in this business considerably reduced the credits awarded, on the other hand, the ill feeling which permeates international relations, had an injurious effect on all the elements of education, honest and scrupulous information was gradually outpaced by an interested propaganda, insinuating or noisy

It is our duty as educationists to reconstitute information in its legitimate place, and to investigate what part should and can be attributed to the international exchange of teachers and pupils in a general plan of international education

The I F T A from its very foundation has devoted attention to this problem

In its first conference in Berlin in 1923, the Federation extolled the international exchange of teachers and pupils, it recommended to the authorities of various countries to facilitate international relations between teachers for the sake of educational problems as well as the promotion of peace, to allow reductions on railways and boat fares likewise on passport fees, to grant allowances to teachers going abroad for the purpose of studying professional problems, to exchange teachers with foreign training schools or to delegate them accordingly, to apply the most favourable rates to teachers travelling in groups with their pupils

In its 3rd conference in Prague in 1930, in view of the satisfactory results obtained by several new departures:

A trip of fifty French teachers in 1928 across Central Europe (Austria, Czechoslovakia, Germany);

Courses for Swedish teachers in Paris and London in 1928, 1929 and 1930;

An international course of lectures organised at the Sorbonne in July 1930 on the subject: the contribution which groupings of teachers, political parties, Trade Unions, writers, scientists can offer for the promotion of a peaceful collaboration of nations,

the I.F.T.A. recommended to member associations to organise international holiday courses for teachers in the principal towns, trips for teachers, and camps for children.

The experience of these last years goes to show that several methods of exchange or simply of "getting together" exist which may be assured of full success.

The synchronized conferences of Oxford in 1935, the International Conference of Primary Education organised in Paris in 1937 conjointly with a session of the I.F.T.A. are proofs that on the occasion of our international conferences it is possible to call together periodically in a judiciously selected city thousands of teachers interested in the peaceful activities of the school.

The 'week of studies' organised in February 1938 in Paris by Mr. Schairer for a small group of anglo-saxon educationists, particularly anxious to obtain exact and reliable information, gave the occasion to supply these educationists with data regarding the work of the I.F.T.A. and the important task accomplished for the expurgation of text-books.

The Scout Jamborees are a remarkable type of meetings of children.

These three experiments and a few others which will be the subject of a report to be presented to the Conference give a clue to the assertion regarding the necessity of maintaining and developing the practice of international exchange. And the questionnaire which follows purposes to find out the premises for a maximum result.

### QUESTIONNAIRE

#### I. Exchange of Teachers.

1. Do the member associations find it desirable to continue the experiments of international meetings of teachers as those of Oxford and Paris?

In the affirmative, what periodical intervals do they suggest between meetings? Have they any suggestions as to organisation?

Advantages and drawbacks of simultaneous conferences? The best means of assuring a good translation service?

2 Are the member associations disposed to organise international courses under their own responsibility, or to second the organisation and attendance of such courses?

3 Are the member associations disposed to favour individual trips of teachers, whether connected with an exchange or not, and to solicit from the school authorities the necessary financial support granting to teachers of scholarships abroad, exchange of lecturers in training colleges, etc?

Do not the associations think that it would be worth while to induce school authorities to take in this field an interest in primary teachers equal to the solicitude they show with regard to teachers of other grades?

## II Exchange of Children

1 Do the member associations share the opinion that it is possible to organise under their responsibility meetings of children comparable to the scouts' Jamborees?

In the affirmative, what should be the age of the children under consideration?

What should be the subject of studies in common? The elements of another language or choice of Esperanto?

2 Are not the national associations of the opinion that in the closing years of compulsive school attendance it would be possible and useful to teach all children the first elements of a foreign language?

3 Are the national associations disposed to cooperate in individual cases of exchange or placing abroad of children, and to promote the development of initiatives of international school correspondence?

## SECOND QUESTION

### Admission to Schools of the Second Grade

*Definition* We call schools of the 2nd grade all establishments which receive children having had some preliminary education (in 'elemental,' primary or 'fundamental' schools) In principle these schools of the 2nd grade keep their pupils until they are ready to enter University

### QUESTIONNAIRE

Please show on a diagram the hierarchy and working system of the various schools of the 2nd grade in your country, mention the origin and further career of the pupils

#### I Entrance into Schools of the Second Grade

1 Is it sufficient to pay the legal fees in order to be admitted to these schools?

2 Does there exist an entrance examination? What is exactly its program? On what anterior studies is it based?

Are all pupils subjected to this examination? Does there exist a line of special capacity tests, and do these tests include the application of methods of psychological investigation?

3. State the age of admission to the schools.

Are exemptions with regard to age allowed? Has the entrance age been fixed on the basis of psychological, physiological or sociological data?

4. How can one enter a school of the 2nd grade in the middle of the year? Must an examination be passed in order to enter one of the intermediate forms? In the affirmative, what is its program? At what age?

## II. Curricula.

1. To what extent and in what respect are the curricula of schools of the 2nd grade adapted to the curricula of preceding schools?

2. Are they a continuation of studies of the first grade with application of the same methods?

3. Or do they involve other methods adapted to this period of the pupil's mental development?

## THIRD QUESTION

### *Conditions of the Teachers' Superannuation*

#### QUESTIONNAIRE

## I. Age limit.

1. Old age and seniority pensions:

(a) At what minimum age respectively are men- and women-teachers allowed to stop active work?

(b) At what maximum age are they obliged to retire?

2. Invalidity pensions:

Can a teacher be superannuated for other reasons than old age or seniority of service? (Illness, invalidity, motives originating in the field of discipline or administration, etc.)

Please describe the procedure, conditions and safeguards surrounding superannuation.

## II. Title to a pension.

1. How is the financial section of the superannuation service organised?

Private undertaking? Public service? Autonomous public fund? Annual contributions provided by the State budget or by local organisations? etc.

2 Under what conditions of age and service can the title to a pension be established?

Is it really a right or only a possibility?

Does the title subsist in case of dismissal?

Are all teachers entitled to superannuation or only certain categories?

### III Calculation of the pension

(a) How is the teacher's contribution computed?

(b) Does the official part of the contribution come from administrative authorities or the State?

(c) What is the rate of the pension and how is it computed? Is it the same for the man and the woman teacher?

(d) Are additions to the normal pension provided for certain categories of teachers—for heavy family charges—for war service—for high cost of living in certain localities? etc

(e) Is the pension available for widow and orphans? In what proportion and under what kind of rulings? Is it available for the widower of a woman teacher?

### IV Plurality of pensions

(a) Is a superannuated teacher entitled to take up another kind of activity?

(b) If in the case of a married couple of teachers one of the conjoints is on active service while the other is superannuated or both are superannuated is the normal rate of the pension paid in full? If the second pension is subject to deduction, state amount of the latter

## FOURTH QUESTION

### Juvenile Literature and International Cooperation

I The IFTA, at different periods, devoted its attention to this subject. In its first Conference in Berlin (1928) the IFTA decided to elaborate the plan of a book for the use of adolescents showing the growing interdependence of nations and the necessity of their cooperation

In its 2nd Conference in Bellinzona (1929) the Federation recommended

(a) The edition of national books suitable for translation into all languages and introduction in the schools of all countries,

(b) The preparation of a pamphlet of international character describing the contribution of every nation to universal-civilization

Although the motions were carried, several members of the Bellinzona Conference pointed out the technical and educational difficulties

of the problem, depending on the variety of requirements and traditions of the different countries.

In its 3rd Conference in Prague (1930), the Federation requested the member Associations to communicate to the Secretariat:

1. A list of reading books used in educational work and suitable for translation into other languages and introduction in schools of other countries;

2. A list of literary works of their country fit to be included in the basic volumes of an international library for schools and popular reading;

3. The facts of their history which, in their opinion, should be mentioned in an international collection of historical articles devoted to the great facts of civilisation;

4. Texts extracted from the works of great historians relating these facts in terms accessible to children, and suitable for incorporation in an international collection of essays;

5. A collection of iconographic documents illustrating those texts;

6. The biographies of men who, by virtue of their writings or their acts, merit to be set up as examples for the children of all nations;

7. Geographical texts, extracts from modern literature and iconographic documents proper for constituting the basis of an international geographical education system.

The Executive Board of the Federation, convened in Paris in 1930, examined the possibilities of carrying out the decisions voted by the Conference in Prague. The discussion brought to the front the difficulties of international solutions and the wisdom for the time being of utilizing national initiatives inspired by the same ideas.

Did the appeal to national initiatives produce any results? The International Federation, whose attention ever since was taken up by more urgent problems, was not in a position to pursue the study of these questions.

And one of the main points needing elucidation is the question what measures, if any, have been taken since 1930 by national Associations as a sequel to the resolutions of the Prague Conference.

II. The International Education Board of Geneva has also studied the question, and the two volumes which it published: *Coordination in juvenile literature* and *Juvenile literature and international co-operation* (in French) should be made available for the Conference.

III. The Executive Board of the I.F.T.A. included the question under consideration in the Agenda of the Copenhagen Conference owing to a proposition of our colleague Olav Kvalheim who spoke in the name of the Norwegian Association of Teachers (Norges Lærerlag).

Mr. Kvalheim demands:

1. That the approximate number of juvenile books appearing every year in every country should be made public;



2 That full information be given by every country as to the existence and activities of an Educational Committee entrusted with the study of juvenile literature, the preparation of catalogues and selective lists,

3 That a full analysis be given of the five best children's books selected every year in every country,

4 That the I F T A make every year a selection of the five best books in the year's production of the world with a view to their translation into the principal languages

IV We think that the best method would be to tie up the discussions in 1938 with those of 1928, 29 and 30, and we submit accordingly the following questionnaire to the attention of member Associations

### QUESTIONNAIRE

1 What steps have been taken with the view to a practical application of the recommendations made by the Conferences of 1923, 1929, and 1930, and to the constitution of an educational library (works for children, works for teachers, magazine articles) purposing to introduce into school life the idea of international cooperation and cultivate it in the children's minds?

2 In the more restricted field of works for children of various ages please name the books published in recent years (for use in school work or for out of school reading) which are worthy of the I F T A's attention

(a) Because they offer in a suggestive form essential aspects of the national genius,

(b) Or because they strive to adapt to the taste and traditions of a country the idea of universality and cooperation of peoples for the common cause of civilisation

3 Do you advocate the preparation of an international catalogue of juvenile books and in the affirmative state the works published in your country which you recommend to include?

4 If you consider it desirable to have these works translated into different languages, what working arrangements would best suit the purpose?

(a) Translation limited to the principal languages or extended to all national idioms?

(b) Edition by National Associations or commercial firms?

(c) Limits of the responsibility to be assumed by the I F T A and the member Associations for the edition and diffusion of these works

### Resolutions carried

(a) In favour of Spanish Teachers' children —

\* This Conference of the I F T A requests the Executive Bureau to continue support of the children of Spanish Teachers through the Inter-

national Assistance Fund and earnestly recommends the constituent Associations to send a substantial contribution to this special Help Fund."

(b) Admission to Secondary Schools:—

"The I.F.T.A., referring to resolutions passed at previous Conferences, especially to the general plan for the organisation of Education voted at the Prague Conference, is of opinion that:

- (1) Ability to pay fees should not alone confer the right to attend a state secondary school. Conversely no suitable child should be debarred from attendance by inability to pay fees.
- (2a) Following the completion of the primary stage the education of a child should continue for a time on general lines in order to allow an opportunity to discover the pupils' special aptitude.
- (2b) At the end of this general course, a tentative classification of pupils should be made according to their response to different subjects, and to the results of the observation of the teacher, aided by a psychological test.
- (2c) Provision should be made during the progress of a course for the interchange of exceptional pupils between secondary schools and schools of other types."

(c) Teachers' Superannuation:—

"In making the following recommendations the I.F.T.A. realises that it is not possible to lay down general rules for all countries. Nevertheless the recommendations, taken as a whole, will indicate the broad direction of a progressive pension policy.

The I.F.T.A. recommends:—

- (1) that the retiring age for teachers be fixed in consideration of the interests of education and the teachers themselves.

The age limit, on the administrative side, involves a minimum and a maximum which could reasonably be determined by conditions in each country.

- (2) that every teacher, after a certain number of years' service, should have the right, in case of disability or dismissal, to a certain pension in proportion to the number of years' service.
- (3) the establishment, where necessary, of an autonomous, non-transferable Pension Fund or Pension Account to take charge, under local or national control according to the custom in each country, of all monies set aside each year to pay pensions to teachers.
- (4) that pensions should not be considered as a favour granted to a teacher, but as a right and that being placed on the

retired list whether for pension or break down allowance should in every case be in accordance with a system guaranteeing complete impartiality

(5) it appears necessary that the value of the pension be according to the purchasing power of money, in countries with unbalanced currency

(6) that a retired teacher should be granted a pension sufficient to enable him to live in a reasonable condition of comfort without being dependent upon further paid work, either full or part time "

(d) Injuries inflicted upon children and civilians by bombing planes —

"The I F T A greatly deplures the deaths and injuries which continue to be inflicted upon children and civilians by bombing planes and appeals to all Governments to do all in their power to prevent the continuance of such attacks

The I F T A further earnestly hopes that a solution to the present armed conflicts will be found through the application of the principles of international law "

—*The Bulletins of I F T A*

## REVIEWS

*India In Portuguese Literature.* By Ethel M. Pope, M.A., D.Litt.  
Published by the Authority of the Osmania University,  
Hyderabad-Deccan.

Dr. Miss Ethel M. Pope is not unknown to Indian Educationists. The volume comprises her thesis of research work and is an attempt to trace Indian influence in Portuguese literature. And a very good attempt it is, based upon materials collected from the principal countries of Europe, well-arranged and well-written. She has done pioneer work in connection with Indo-Portuguese Movement for the promotion of which there is plenty of source material in the libraries and Archives of Portuguese India, much of which has never yet been worked over. In this volume she gives us something to go on with and hopes the Indologists will take up this vast field for research in right earnest.

"The book begins with an introduction in which are described the characteristics of the Portuguese race, the birth of their nationality, their warlike and adventurous qualities, and their culture. This is followed by four chapters comprising respectively the Classic Epoch, its genesis and its results, the Gongoric, Arcadian and Romantic schools, each containing a brief historical résumé, and a biographical and critical review of the works in any branch of written thought which have any reference to India." The last chapter contains a sketch of the Indo-Portuguese Movement "which had its origin in India itself."

The whole work makes fascinating reading. Dr. Pope has made herself master of an immense literature inaccessible to the ordinary student. She has ransacked all available sources in order to gain authentic information and the result of her labours is a vitally new presentation. She portrays a civilisation in many respects advanced and progressive, but marred by religious fanaticism, gross persecution and lax morality. Although it is her first work of research, there is nothing amateurish or immature about the volume. It displays wide reading, balanced judgment, and a perfect command of complicated material.

We wish the space had allowed us to quote from the Indo-Portuguese poets treated in the last chapter. The description of the past splendour of India by Fernandes, the story of Raja Sibi

of Benares by Fernando Leal, the Sati by Barreto, the Hymn to Vishnu by Paulino Dias, the story of Ram in "A Morta" and Thanks to the Monsoon by Mendonca are evidences of how Indian thoughts and Indian ideas can be delineated by Portuguese poets.

Dr Pope declares that it was the merest chance which made her choose her theme and we have no occasion to doubt it. But we wish many other authors could also hit this fortunate chance to produce similar remarkable works of value and merit. She has set a high standard for subsequent writers on the theme, on which we congratulate her.

---

*Essential Facts About The League of Nations* Ninth Edition  
Revised Prepared by the Information Section of the  
League of Nations To be had of the Indian Branch Office  
of the Secretariat of the League of Nations, 8 Curzon Road,  
New Delhi Price 1s, 25 cents

This excellent handbook—a book of reference about the League of Nations—is now in its ninth edition. The general make up is continued but all information has been revised down to December 31st, 1937. The full particulars given in a concise form should be of greatest value to teachers and pupils and also to the general readers interested in this great international movement.

The volume is divided into seven parts. the first part gives the text of the Covenant while the 3rd part deals with the Constitution and organisation. The political activities of the League, its technical work and its relations with the outside world have been all set out in a comprehensive manner. The sixth part gives information about the activities related with the League, viz, the International Office for Refugees, the International Centre for Research on Leprosy, the International Bureau, the Red Cross and the International Relief Union. There are useful annexes and a number of plans and charts—remarkable for the wealth and accuracy of their details.

The selection of material has been made with knowledge and wisdom while the editing has been accomplished in a manner deserving of high praise. As a work of reference it is authoritative and indispensable.

---

*Changes and Trends in Child Labor and Its Control.* By Homer Folks. Published by National Child Labour Committee, 419 Fourth Avenue, New York City.

Mr. Folks's pamphlet deserves careful study. He describes lucidly and succinctly the changes and trends in child labour and its control in U.S.A. "In the early 1800's the employment of children, even of 8 years old, in cotton mills was regarded as a practice of public benefit. A Century later child labour in factories was recognised as an evil." "At the present time no one lifts his voice in favour of child labour." Mr. Folks defines child labour as "the employment of children in any occupation at unfit ages, or for unreasonable hours, or under unhealthful or hazardous conditions or while the schools which they should attend are in session." The National Child Labour Committee was founded in 1904 and since then it has striven manfully through propaganda and legislation to decrease child labour. In 1900 there were 1,750,178 children 10 to 15 years, inclusive in gainful occupations. In 1910 the number rose to 1,990,225, just under two millions. But between 1910 and 1920 child labour decreased 46·7 per cent: from 1920 to 1930 it decreased 37·1 per cent.

Taking everything into consideration—the limitations of the census count and the occupational shifts—Mr. Folks estimates that even in 1938, the total number of children under 16 gainfully employed is approximately 850,000 which does not mean that child labour is "almost non-existent."

In the succeeding pages Mr. Folks gives the story of child labour control which is interesting reading. After detailing the struggles for State and Federal Legislation he concludes with the responsibility of social workers. In the opinion of Mr. Folks "there are two powerful forces constantly at work which make for the continuance of Child labour," despite the fact that there are ten millions of unemployed adult labourers. Firstly the child worker is cheap, and the industries, operating for profit, think of keeping production costs down and wage rates for adults low by employing it. Secondly there are large groups of families, living on a marginal subsistence standard, under the constant threat of imminent want, who take their children from school and use them "to eke out the family income." Hence Mr. Folks concludes that as social workers we should not only improve child labour standards through legislation but should support all measures "which will bring a greater degree of economic security to that third of our population which still is

ill housed, ill clad and ill nourished, and which turns to child labour as one source of a slightly higher degree of economic security

We have every sympathy with Mr. Folke's vigorous plea for increasing interest in Child Labour Movement, and admire the efforts of the National Child Labour Committee, which are worthy of imitation in all other countries especially India

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*World Education* May 1938 Published by The World Federation of Education Associations, 1201 Sixteenth Street, N. W., Washington D. C. Annual subscription 2 dollars

This international educational magazine to be issued six times a year is the official organ of the World Federation of Education Associations and seeks to promote exchange of knowledge of educational ideals and the practice and experience of the various countries of the world. The issue under review is delightfully fresh and instructive. We have educational information here regarding Mexico, Germany, Turkey, England, Poland, Bulgaria, France, U. S. S. R., Ireland, Scotland, Belgium, U. S. A., Latin America, Brazil, Bolivia, Puerto Rico, Argentine, Uruguay and India. The articles are mostly extracted from the reputed educational journals and their range and variety are remarkable. We have great pleasure in commending it to the notice of the various educational organisations and institutions of the country. The magazine has only to be seen to secure the welcome and popularity which it deserves.

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*A Way to English Primer and Books I—V* Published by Oxford University Press. Primer and Book I 7 annas each, Book II 8 annas, Book III 10 annas, Books IV and V 14 annas each

These readers ought to prove of the highest practical value to teachers and students of English in India. The pieces have been written or selected to ensure that they are well within the capacity of the pupils. "The pupils' command of language is built up gradually by extension of his existing knowledge." Pronunciation and grammar both have received adequate attention. Each lesson is carefully planned and linked up with what has gone before so that there is absolutely no waste of effort

The get-up and the print are good while the illustrations leave nothing to be desired.

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*English Print-Script and Semi-Upright Copy Books. Parts 1 to 6.* Prepared and published by B. D. Nijampurkar, 736 Raviwar, Poona 2. Price 2 annas each.

These are two sets of copy books, one meant for teaching print-script writing and the other for script writing only. The matter is graded; the paper and printing are suitable. The series is attractive and will facilitate the teaching of caligraphy in Indian schools.

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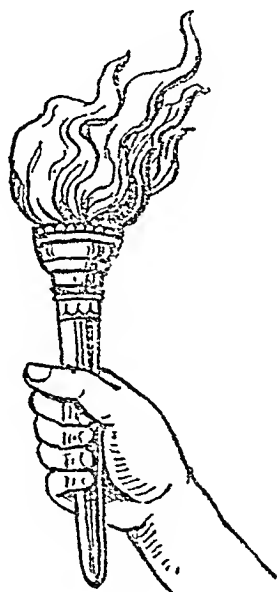
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VOL. III

No. 11

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR :  
D. P. KHATTRY



NOVEMBER, 1938

ALL-INDIA FEDERATION OF  
EDUCATIONAL ASSOCIATIONS

POST-BOX 52, CAWNPORE

PRICE ANNAS EIGHT

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### Editors' Note

The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments, (d) articles containing statistics and their application to the solution of educational problems, (e) short notices of original works, (f) news of interest to educational workers.

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# Indian Journal of Education

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## IMPORTANT INDIAN PROBLEMS

BY

SIR MIRZA M. ISMAIL, K.C.I.E., O.B.E.

*(Extracts from the Convocation Address of Madras University.)*

### Communalism.

In communities which are large and whose composition has been influenced by many historical factors, particularly in communities which have been subject to invasion, there are bound to be small groups which retain their own individual characteristics. The relationship between the larger group and the smaller one is bound to be difficult. The larger unit cannot afford to ignore the smaller because that would destroy all real unity. Nor can the larger unit seek to mould the smaller into a common pattern of culture and deny it political rights; for that would merely lead to disintegration. To deny to the minorities their right to a full share in the commonwealth, and full scope to follow their own religious faith and develop their own culture would be distinctly indefensible. What is most disquieting in the present situation is the sense of separateness of the minorities and the impatient attitude of the large groups towards the smaller.

\* \* \* \* \*

What we perhaps most need both as individuals and as a people, is tolerance, tolerance for the views and acts of others. The roots of communalism lie deep in human nature. Therefore it is that we in India should be specially careful. If only we could discipline ourselves to adopt, not in words only but also in deeds, a sympathetic and friendly attitude, especially towards the religious beliefs and practices of others, how happy our country would be and how happy we should be ourselves!

Believe me it needs no great effort to do that. It is only a question of making up one's mind. I appeal to you to try to do it. You will be giving, I assure you, great pleasure to your selves, and what is more, to others, and the greatest of all pleasures is to give pleasure to others.

### The problem of unemployment

The accentuation of communal bitterness and the widening of communal cleavage are not, however, the only disquieting features in the political and social landscape of our country. The economic pattern of the country seems to be unhappily constructed as far as concerns the prospects of the young men and women who go out of the portals of the University. Bagehot wrote

"People contrive to find work to employ them, body and soul are kept together. And this is what mankind has to show for its six thousand years of toil and trouble!"

But what would Bagehot have said of a social fabric that admits of, as it does in Europe and America, millions of people to remain unemployed for months and even years? If we compare conditions in India when I was leaving the University with those obtaining to day, it would appear that there was then greater correlation between the number of graduates and the number of posts and openings available in the professions and Government service. We could look forward with confidence to ready employment of a kind suited to our equipment in the economic framework of the country. The graduate of to day, I am sorry to say, cannot have the same confident outlook.

Looking back over three decades, we see that a tremendous advance has been made since the first Indian Industrial Conference met in 1905, under the presidentship of Mr R C Dutt, when one of the speakers referred to the distance and cost of coal fuel and the consequent limitations on Indian industrial development. Since then the iron and steel industry has become a great factor in the economic life of the country and the cotton mill industry has definitely succeeded in reducing imports of cloth to a position of secondary importance, while hydro electric power has developed in a way which no one could have foretold. One might have thought that these developments and the advance in commerce and banking would have increased the field of employment for university graduates, either directly or indirectly, by increasing the area of employment in the professions and in government service. There has indeed been a great increase in

the number of government employees and in the number of persons engaged in the professions, but the spectre of middle-class unemployment, by which we mean the unemployment of the educated, haunts the economic scene.

The one thing about which everyone seems to be agreed is that the educational system of the country is partly responsible for the evil, and in particular, the universities are blamed as being factories for the mass production of graduates and for dumping them on a glutted market. The demand for increased expenditure on primary education is generally accompanied by a deprecation of state grants to universities.

It is not for me to deny that the evil is a real one, or that it needs immediate attention in the interests of the universities as well as of the social economy of the country. But it is necessary to have a sense of perspective both of time and space. For one thing, the possibility that the number of graduates turned out by the universities might overtake the number of those that can be absorbed in employment has always been in the air, and it is instructive to find that, so early as the eighties of the last century, Convocation speakers already detected a superfluity of graduates in relation to the absorbing capacity of the community. This only means that from time to time there is a lag between supply and demand. In our preoccupation with our own troubles we should not forget that the problem of unemployment is a national one and, indeed, an international one.

There is sometimes a lag between the operation of the educational system of a country and that of its economic machinery, so that the output of the educational system both in respect of numbers and their distribution bears no close relationship to the needs of the occupational pattern of the country. The great majority of people are forced to fit themselves to the occupational pattern of the community without any special training for any occupation in particular, although in the past the system of apprenticeship was a useful hyphen between the recruits and the occupations. That system has broken down in the western countries, but in most occupations the demand for special training is becoming almost co-extensive with the entire body of employees. This need of the economic organization of the country is met by a progressive increase of vocational education, and specially since the War there has been a tremendous advance in this direction in the western countries.

In our country the untrained recruit turns either to unskilled occupations or to agriculture. The educational system of the country was built from the top downwards to supply the govern-



ment of the country with an adequate and suitable number of persons competent to serve in the lower ranks of government service. The system of education was thus vocational in a narrow sense, but as the number of schools, primary and secondary, increased, and as the number of successful entrants from these lower grades of schools to the universities also increased, it follows that the number of graduates has also increased. But there has not been a corresponding increase either in the number of posts in government service or openings in the professions. Hence these tears. Unwise suggestions have been made to restrict admission to the universities and even to high schools. The country is by no means over supplied with educated persons, and education in any stage has not reached saturation point, if indeed such a point can ever be reached in a community. But there is an urgent need of a planned distribution of numbers in successive stages between different courses, some of which will lead to a degree in arts and science, and the rest directly to one specific occupation or another.

Some kind of proportion in numbers must be established between the present high school and university courses and new courses of a realistic and vocational character which are urgently needed if the economic life of the country is to become more efficient and productive. There is a special need for a reorganization of the high school courses in order to secure a better type of entrant to the universities. For those who are not proceeding to the universities there should be vocational courses either at the high school stage or afterwards. Not for every boy who enters the school gates should a degree be regarded as the final goal, nor should a degree be a necessary qualification for employment of all kinds. Take the case of the English Polytechnics. They train between ten and twenty times as many students as the universities. Moreover, post secondary diploma courses need not fall below the standard of university courses and they may fully attain to the requirements of specific occupations. Whether these diploma courses should be under the control of the universities or not is a matter of detail. But the university complex in our country makes it desirable that for a time the universities should at any rate remain in close contact with the diploma courses.

Elsewhere we know that such diploma courses of a vocational character are controlled by national bodies in intimate relationship with the respective occupations. In our country post secondary education either has meant education in a university, or such courses, as engineering, which have been generally associated with institutions of a university standard. If the rush

to the present university courses is to be checked, without, at the same time, creating a sense of discontent among those who are prevented from entering upon such courses, it will be necessary for a time for the universities to be in intimate contact with the new courses. As the educational field becomes more diversified, it may be possible for another body to take over and administer these courses. By that time, let us hope the university complex will also have disappeared as the result of familiarity with, and benefit from, the vocational courses.

### **The universities and unemployment problem.**

The problem of unemployment is one which Indian universities must help the country in solving. Otherwise, they will not have discharged their responsibilities to the social order. Our universities cannot afford to wrap themselves in their academical robes and turn away in cold disdain from the problem, and continue to dump their products on an exasperated community. The era of splendid isolation and unchallenged privilege is gone for ever, and universities, like any other social institution, must pass the test of social serviceability. No social institution can justify its demand for support from the community, particularly financial support from public funds, unless it both performs, and makes it clear that it does perform, a service of social worth. Extension of the frontiers of knowledge and colonisation of the area thus won from time to time will certainly remain among the great tasks of the universities, but the training of the individual for life in society is also to be counted as one of their indispensable tasks. Such training of the individual is not of course merely vocational nor mainly vocational, though I do not see any reason why preparation for earning a livelihood should be a cause for deprecation or apology, since we all have to earn our living.

My stress on the part that the universities should play in solving the problem of unemployment does not mean that the entire responsibility is theirs. Universities in particular, and the educational system in general, can only be expected to adjust their output to the occupational needs of the country. The range of occupations in a country and the numbers that each occupation is capable of absorbing depend most of all on the economic policy of the state and on the vigour with which a right policy is pursued. In a country like ours, which is as one-sided in its occupational pattern as in its educational system, there is a great need for the government to plan the development of trade and

industry and to find fresh avenues of employment for the rising generation

### Responsibility of universities

Having said so much about the vocational objective of education, let me turn to its other objectives, citizenship and culture, specially in the case of university education. More than ever the universities in India bear on their shoulders a great responsibility. That responsibility is no less than the training and equipment of the youth of the country in the service of their Motherland and their fellow men.

True to scholarship and national in spirit, our universities, whether or not they are generously or amply or even sufficiently equipped, should carry on the sacred work of fashioning the best type of Indian, attracting the young to service, instilling into their minds the idea of civic duty, preserving the great popular heart from envy and hatred, and establishing a fortress where men may repair and make a stand for the eternal values. Our universities must be the refuge of Truth and the home of Freedom, teaching our young men to think for themselves and to make a good life, not simply a good living. I do not mean mere goodness, for untrained goodness does not count for every thing in this world, whatever may be its felicities in the next.

### Duty of young graduates

It is chiefly to you young men and young women that pass out of the portals of the universities that the country will look for guidance in the difficult tasks that lie ahead. You are the people that will largely shape her destinies in the years to come. Never was there so much need for youth to cultivate habits of high and serious thinking. Your fundamental problem will be to find continually more points of common interest, and to think in larger units than your ancestors did, to think across dividing lines of class and caste to the common denominator of mutual interests, aiming at a higher socialisation of the races in class relationships and national relationships. Work for a united peaceful India with no other thought in your minds than that of service to the Motherland. Provincialism, communalism, and linguisticism constitute serious problems in our country to-day. You will be able to approach these problems with more flexible minds than we of the older generation. The fruits of truly co-operative industry and the widespread feeling of goodwill and common interests among all concerned in the activities of life

will conduce perhaps more than anything else within our grasp towards the true and lasting progress of our country.

In spite of the multiplicity of inventions and comforts we are no happier than our ancestors, probably less happy than they were. Happiness depends to a large extent upon our outlook on life. We are the victims of all sorts of influences and propaganda. "People believe easily," says La Fontaine, "what they fear or what they desire." We need education to-day as never before. It is our only hope of preserving the ancient ideals of truth, tolerance and freedom in a world which seems bent on destroying itself. It is our only hope of resolving bewilderment, of protecting our people from sinister influences and of recapturing happiness.

### Political progress.

As you know, India is at present engaged in a constitutional experiment on a vast scale. Whether that experiment will be a success and lead to a further and fuller realisation of her political aspirations will depend, and depend entirely, upon her ability to produce a sufficient number of leaders of the right type—men of character and ability, character even more than ability, men of vision. For, in the last analysis,

What constitutes a State? Not high raised 'buttment,  
Levelled mound, thick walls, and moated gate.  
Not cities proud, with spires and turrets crowned,  
But men—high minded men, men who their duties know,  
And knowing, dare maintain. These constitute a State.

And India has been rich in this class of men.

### Universities and city life.

Time was when centres of learning both in the East and the West were located "far from the madding crowd," though the Universities of Benares and Taxila in our own country and the Universities of Paris and Bologna in Europe are unmistakable evidence that learning and culture did not fail to prosper even when their devotees rubbed shoulders with men engaged in everyday tasks. However that may be, the days of isolation are gone, and learning must come down from the mountain tops to the valleys where men and women live, and be in daily contact with them. Universities have been established in recent years in the West in large industrial centres such as Manchester and Liverpool, while even Oxford and Cambridge, which to a great many people

are the modern representatives of the old hermitage schools of India, are no longer isolated from the main currents of life of the nation. Our universities are all located in the leading towns of India, but I fear that they live in seclusion and are not influenced by the life that sweeps by them, nor have they established intimate contacts with the people from whom they draw their sustenance and for whom, in the last resort, their work is intended.

If the noble ideal of democracy that 'the whole conduct and development of a people's culture is to be universally shared' is to be realized, it will always fall to the universities to serve as benignant lamps of culture at which the common people may light their modest rush lights. This duty to society is discharged in part through the young men and young women who pass through the university, who, in various posts of duty and service, act as centres of culture and enlightenment.

### **Extension and publication work of universities.**

A more direct and extensive way in which universities can help to realize this great ideal of democracy is by means of extension and publication work. It should be the mission of Indian universities to take to the very doors of the people knowledge and culture in an easily apprehended and assimilable form, and this can be done both by speech and by print. Extension work has been a powerful method of spreading university culture and establishing contacts between the university and the working classes in Great Britain, and although several Indian universities have extension departments, something more continuous and thoroughly organized is needed, so that regular courses of lectures can be given in a number of centres in the area covered by a university. This extension work must be supplemented by the publication of small monographs in simple language which will bring modern knowledge within the reach of the common man. It is well known that some of the popular text books in England of a university standard are really a series of extension lectures revised and reprinted. For our purposes, however, the popular standards set by the B B C will suffice. The B B C have increased the effect of the spoken word by translating it into the printed word, and we might profitably follow their example in regard to our popular lectures.

### **The importance of vernaculars**

Both the extension work and the publications should be in the languages of the areas served by the universities. The work

of the universities is carried on in English, and for a number of years to come at any rate, will continue to be in that language, but it is equally certain that for a number of years a knowledge of English will remain the monopoly of only a small section of even the literate class. Therefore, it is all the more necessary that the universities should make a practice of arranging for lectures in the languages of the country and publishing them, so that the literature of knowledge, in which the Indian languages are lamentably deficient, may receive continuous accession. In this way our languages will develop a plastic power of expression which would have surprised our forefathers.

### University settlements.

There is another way in which our universities can bring themselves into intimate touch with the masses, and incidentally give a sense of reality to the teaching of important branches of study such as economics, sociology, politics, and statistics. In the poorer districts of London a number of university settlements have been established. The object of these settlements is to ameliorate to some degree the life of the poor who live in the neighbourhood. These settlements are lighthouses which radiate their beams of friendliness and comfort into the surrounding darkness. A number of the colleges in Oxford and Cambridge have their own settlements in the East End of London, and the members of a college not only support the college settlement with subscriptions, but are also encouraged to spend some time in it and take an active part in the work. There is surely room for similar work in our own country, but here such work needs to be done not only in urban, but also in rural areas. I suggest that our universities should give their attention to this matter and institute centres of work in industrial areas as well as in rural parts. Settlement work in rural areas can be made an effective part of rural reconstruction, which in its turn is part of national reconstruction.

## REORIENTATION OF TEACHERS' CONFERENCES

BY

SIRI SRI PRAKASA, M A , M L A , Bar at Law

*(The Presidential Address of 14th U P Secondary  
Education Conference)*

FRIENDS,

My first duty—and I am fulfilling it in no conventional sense—is to offer my grateful thanks to the organisers of this Conference for the great honour they have sought to do me by electing me as your President this year. I cannot however congratulate you on their choice as my approach to the subject may not be yours, and I may appear to be unnecessarily and irrelevantly sounding a discordant note. In the very nature of things in conferences like these where the representatives of a particular interest gather together, the main subjects of discussion inevitably tend to be the betterment of the material conditions in which they have to live. With the best intention in the world, situated as we are with all the unavoidable limitations of human nature, we cannot but feel that our own particular difficulties are the greatest in the world, and that it is the world's duty to remove them. We are likely to lose sight of the main and fundamental fact that we are ourselves but a part of a Great Whole, and that just as anything that affects one part, affects every other part, so are influences working for the weal or woe of any one group of human beings, bound to affect favourably or adversely every other group that goes to make up the body politic. Even though other groups of human workers do not realise this in the storm and stress of life so full of competition and of bitterness, I must pray that teachers at least must recognise this basic truth, and must so work that they may lead society from generation to generation to higher ranges of thought and nobler fields of endeavour.

### Approach to Our Problem.

It would, to my mind, be a sad thing if teachers in this Conference assembled, have nothing else to talk about or resolve upon, than their own rights and the obligations of society towards them, of their alleged grievances against humanity in general,

of their own pays, privileges, pensions, powers and position; and if they are oblivious of the duties they owe to others by the very fact that they are teachers. I shall be sorry if they should forget that the average Indian householder is beset with difficulties of all sorts—social and economic; and that teachers and those whom they teach, cannot be regarded as something apart from the large body of householders as such, whose interests are to be safeguarded and whose position alone is to be secured regardless of the consequences that may ensue to others. My main attraction to the great movement of Mahatma Gandhi that has convulsed us during the last two decades, has been, I must candidly admit at once, the simple but the all-important fact that he declared from the house-tops that if we suffer, we suffer from ourselves. We ourselves are responsible for the difficulties we undergo; we must look within ourselves for our inherent weaknesses that have brought us to where we are; and we must ourselves make the necessary efforts and sacrifices to enable us once more to take our proper place among the nations of the world.

### Our Duty by Ourselves.

As you all doubtless know, before Mahatmaji came on the scene, the only work that even our non-official political organisations did, was to pass high-sounding resolutions regarding what others should do for us; and the leaders dispersed at the close of their meetings, fully satisfied within themselves that they have done their duty by their country; and that if we continued to suffer any disabilities, they were due to the faults of others and not to our own. Mahatma Gandhi raised the standard of revolt against this slave mentality, and wanted us to resolve as to what we ourselves should do. Whether we agree with his programme or not, the fact remains that when under his inspiration we resolved that we should spin and wear *khadi*; that we should found national educational institutions and not go to the law courts; we should live at peace with our sister communities and speak the truth;—we were resolving something for ourselves and not wanting anyone else to do something for us. That is the method to learn self-reliance and self-respect; that is the way to do things and to get things done. These simple teachings have revolutionised our society during the last few years in a manner which begging and besecching for half a century before could not do. I pray that your Conference may follow this method and take decisions as to what teachers themselves ought to do, and not beg others that they may do this or that for them.

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## The Objective in Education

The problem clearly is as to how the boy that is placed in charge of the teacher is to be brought up so that he may be enabled later to find his own niche in life, so that he may be truly fitted for the work he may take up, so that he may feel happy in the work he does, so that he may do that work efficiently, so that he may be a trustworthy citizen of his country, truly useful to himself, his family and his society. If schools and colleges cannot provide us with true citizens, they had better close their doors. We do not want either walking dictionaries or scheming careerists, we want men and women who know their duties and perform them properly, whatever the field of their activity. Whether a person is a scavenger or a shoemaker, a minister or a judge, it does not matter. What matters is how he performs his work. It is not the work that is bad, it is the man that can be bad. No work is high or low every work is equally necessary for human life. It is the man who can be high or low because he does or does not perform his work properly, because he is reliable and efficient or otherwise. Teachers have to produce men and therefore must first be men themselves. They must teach more by example than by precept. They must create an atmosphere inside and outside the classroom within the orbit of which those in their charge feel happy to come, and which enables them to play their parts properly in the world around them.

## Our Search for the Citizen

India needs at the present moment more than ever, men and women who would shoulder the great responsibility of building up her social and economic life in every department. India needs good scavengers, washermen and shoemakers, good traders, merchants and bankers, good soldiers and private and public servants, good teachers, preachers and writers. We have too many men but few of them are really good. That is why we suffer, that is why we do not succeed, and not all our complaints against others can make up for our own inefficiency. The problem of unemployment which seems to stare everybody in the face like a veritable nightmare, cannot be solved by artificial means. It can only be solved by the building up of character, by the development of the social sense, by the cultivation of civic virtues, by the realisation of true values. Therefore the first duty of the teacher is to see that those who are trustingly put in their charge, are so moulded as to become real persons of

character. It is a pity that when we talk of character in our country we only think of sexual conduct. Important as that factor in individual life is, even more important are the virtues of truth and courage; devotion to duty and sense of responsibility; method and punctuality; initiative, reliability and determination. Moreover, we need to cultivate wide sympathies and a deep understanding of our fellow-men: that alone can take away from us the narrownesses bred by considerations of caste and creed, and eliminate from our midst the canker of communalism that is ruining our social life and blocking our path to progress and happiness. In the secondary stage where a child flowers into adolescence but where the individual is still not old enough to take upon himself the burdens of life, the formation of character has to be taken in hand most carefully and strenuously. I beg all teachers of secondary standard to remember this aspect of their duty most sedulously. They cannot afford to blame parents. The parents have entrusted their boys to the teachers so that they may be free themselves for their own absorbing professions. If they could themselves be teachers also why need they undergo the trouble and expense of sending their children to schools and colleges? No teacher dare shirk the work he voluntarily undertakes.

### **Necessity for Discipline.**

Then there is the question of discipline. No nation can do anything unless it learns discipline in its schools. If we do not learn how to obey, we shall never know how to command. The confusion in our social and economic life is entirely due to our utter lack of discipline. We may blame our homes. I know there is much to be desired there. I realise that if only mothers would refuse to give their children food when they do not turn up in time, three-fourths of our problems of unpunctuality and listlessness that form such prominent features of our life, would disappear. I realise if elders in the home did not indulge in small talk and scandal before the young, all unhealthy inquisitiveness in other peoples' private affairs that is unfortunately so blatantly present in us, will go; and an healthy curiosity for real knowledge will take its place. I realise all that; but I cannot exempt the teacher from all blame when he is unable to counter the evil effects of home; and by his own example teach both the parents and their children what is best for them. All organisation, all sustained and corporate work, depend upon mutual reliance; and if we only learn the simple art of mutual trustworthiness; of mutual accommodation; of cultivating a sense of

humour, of taking defeats and disappointments in the spirit of sport, and working and struggling steadfastly whatever befall, we shall have no difficulties in embarking on adventures and rearing up organisations of any dimensions, so necessary at the present stage of human development for both individual and social well being. What we so greatly lack is the capacity to work together, and discipline enables us to do that. We are too fond of our own individual selves and soon develop a self-satisfied smug complacency about ourselves. That hampers us in our work in life and with others. Discipline will surely cure us of all these serious drawbacks of character and conduct. Let me add here that though discipline appears so distasteful when we think of it, as a matter of fact it soon becomes second nature and we do not feel as if we are putting ourselves to any special trouble or obeying irksome orders when we automatically follow it. Discipline however, let me say quite frankly, does not necessarily mean obeying all rules, good or bad. Occasions may arise when we may be compelled to break them in deference to a higher command or in obedience to a great Call. Then discipline will require that we must suffer the consequences of our actions without wincing, and either justify our rebellion by success or go down cheerfully in the struggle without murmur or complaint.

### Importance of Physique.

We have also to tackle the important problem of physique. I am for compulsory drill which is both an economical and an effective method of physical training and keeping the body ever alert and active. Large masses of students can take part simultaneously in drill instead of just 22 individuals playing on a cricket, football or hockey field and the rest looking on as mere interested spectators. Drill makes us all walk in step, and when we do that physically we may be able to do that mentally also and thus organise a whole nation in no time for a common purpose. The physical side of life cannot be neglected. Bad health has become such a feature of our lives that we are not only not ashamed but are actually proud to say that we are not well. Various physical ailments are our constant excuses for not doing this or that. If we feel that a body is a mere shell when the soul is not beautiful, we must also remember that the soul cannot express its beauty unless there is a body to sustain it. Many a beautiful soul has been cut off in the prime of its constructive activity because the body prematurely racked and ruined by disease, could no more contain it.

## The Training of the Body.

The body therefore is an important thing which must not be neglected. It is the teachers' duty to tell the students how the body is to be built; and with sympathetic regard to the domestic budget of the student concerned, give him advice on food and drink, on sleep and work, and on everything that, commensurate with the financial position of the family, may enable a boy to have healthy and happy physical surroundings. Character, discipline and an healthy body would be of far greater value to a student in his journey through life than the cramming of information retailed heresay by compilers of books and collectors of essays. And I must ask all teachers to remember that they must see to it that none of their students come to look down upon manual work; and that therefore in some form or other they are compelled to use their hands and feet so that they may always realise the dignity of labour; have ever a sympathetic and considerate understanding of the dangers and difficulties of those whose life's work is endless physical toil; and may also be able to put their own hands to any work that may require to be done even when that is not necessarily their profession. Physical risks our boys must be prepared to take: they must not fly from physical pain. They must also learn to take a licking with a smile and without rancour, when necessary.

## The Alert Mind.

Let me not however be understood to say that I underrate the importance of the training of the mind. I am not an enemy of literary education at all. I want a boy to be taught science, philosophy, mathematics, languages, poetry, art, music and everything else. But I know the limitations of human capacity and I also know the needs of our people at the present day. I do not want a class to be created, that is separate from the stream of life; that finds itself strange in the society in which its lot is cast; and which because of its alien nature, is useless to itself and to its fellows. In the secondary stage therefore we must work for a proper course of studies which can be easily and economically undergone by our boys; which will be useful to them in life; and which makes their minds alert and vigilant and not inert and lack-a-daisical. I fear I cannot take merely an idealistic view of things. I regret I have to be very utilitarian; because in the midst of the vast changes in which we find ourselves, we want practical men and women who will be able to take up the work in hand and to help in pushing the country forward, and not

spend their time in mere musing over might have been's or ought to be's. Knowledge for its own sake, education as its own goal, —are ideals that can wait for our children and our children's children to revel in, when the country has attained its freedom and become once more the land of plenty. To day we have so few real men and so many mere human forms, that we cannot let go the few men that we have, to form their own intellectual sets away from us and to deprive us of their services. We have to enlist all eligibles in the common cause and therefore we have to tune our education to our actual needs and requirements.

### Importance of the Secondary Stage.

Let us not forget that most of even those who somehow or other in the midst of poverty and difficulty, are able to reach the secondary stage of education, will have to drop off and enter life after their courses are finished. But few can go up to the university stage. Therefore the responsibility of the teachers of the secondary stage is very great indeed, for they may be giving the final finishing touches to most of the men and women under their charge to fit them for that great university, namely, the university of life and life's struggles. Society must honour its teachers and they must be worthy of being honoured. He who disrespects a teacher dishonours himself. In the very nature of things, teachers have to be comparatively poor. In fact it is a curious thing that perhaps India is the only place where very often the teachers are richer than the students whom they teach. In the universities particularly, the struggle for higher salaries and lesser work, for special separate payment for examinations, for having their compilations prescribed as course books so that large financial returns may ensue,—are common things which cannot but compel so many of us to hold down our heads in shame. Of course, the teachers must be paid by society properly, commensurate with the society's means and in keeping with the needs of the teachers themselves. A teacher's needs are not only the barest necessities of life but also adequate comforts to enable him to carry on his intellectual work. A teacher living in luxury is a contradiction in terms, and it is a phenomenon that is only seen perhaps in India. Even rich men brought up in the lap of luxury when they take up the teacher's vocation, despite their having hereditary wealth, begin to live simple lives, because there is beauty, there is dignity, there is efficiency in such a life. But a teacher left to starve in abject penury is a sight that is shameful for society. Such a scandal must also be eliminated.

## Teachers and Knowledge.

Teachers must remember that they have not only to teach but also to learn. To me it is a pathetic sight to find that many of our teachers try to learn nothing beyond what they learnt before they became teachers. When a teacher puts the letters 'B.A., L.T.' against his name, let him not forget that the stream of knowledge did not stop flowing when he was awarded his degrees; and that if he is really a 'B.A., L.T.,' he must keep abreast of the latest researches and investigations, and be capable of becoming a 'B.A., L.T.,' at any moment and again and again whenever put to the necessary moral and intellectual test. I say to teachers in all seriousness that if they do not keep up their studies; if they are not familiar with current thoughts and the procession of events as well as with the learned magazines and up-to-date books in their own special subjects; if they are merely satisfied with what they learnt in the past; and if they just give out from year to year the same lessons in their classroom—and even the veriest mediocre will become an expert by repeating the same things mechanically a few times in succession—then they are certainly no teachers for the boys that are men-to-be. Of course teachers must have also their recreations and relaxations; but that does not mean that they should learn nothing beyond what they have already learnt at school and college. They must be prepared to take themselves and their boys ever upwards and onwards; and that they can only do by spending their leisure—and teachers have more leisure from professional work than most others—in hard studies and in persistent pursuit of knowledge.

## The Problem of Vacations.

It is usually but erroneously thought that it is the right of a teacher to have about seven months out of twelve as vacations even though persons engaged in other pursuits, physical and intellectual, work all the year round regardless of sun or rain or wind. Teachers get leave from work when the sun is too hot or the rain is too heavy or the wind is too cold. No profession has summer or winter vacations—I am leaving the Indian High Courts out of my consideration for the moment; and even if they have short ones, certainly none has any rainy holiday. What is the principle, then, underlying such long and frequent periods of leisure in school and college? The simple principle is that teachers have to deal with boys; and boys must have holidays. When boys have holidays, teachers naturally also get them. Life

in the best of circumstances is hard, and so the principle is: let the youth have some enjoyment and some opportunities of acquiring extra mural knowledge by travel and recreation, before they enter life with all its heavy calls and hardships. The teachers there fore also get these holidays along with their boys, but really these holidays are not meant to be holidays for teachers they are meant for still harder work for them. They must do their studies, they must do their writing, they must do their thinking when their boys are playing. It is in these vacations that teachers produce their great works which the boys later love to learn. If our teachers however think that all these vacations are to be spent in idleness, in dozing and sleeping, in listless small talk, in playing cards, then society must seriously think of restricting their holidays.

### Our Responsibilities and Opportunities.

For our teachers there is an additional duty and a wonderful opportunity. They can voluntarily take upon themselves the task of adult education. They can utilise their long periods of leisure in the elementary education of those who are bereft of all literacy. They can also induce their students to help in the good cause. In fact I seriously think that no boy who cannot prove to the satisfaction of the authorities that he has imparted the knowledge of the three R's at least to 20 or 25 men and women, should be given the necessary hallmark of having successfully passed the secondary course of studies. In a poor country like ours, the duty of those who are well off in any way, towards their less fortunate brethren is particularly pressing, and the easiest, simplest and cheapest method of spreading literacy and rudiments of civic education, is for teachers and students of secondary standards who are themselves really ultimately helped to be what they are by the unfortunate uneducated and illiterate toilers in field and factory—to take the light of knowledge to the darkest corners and to illumine the heavy laden hearts of the ignorant and the unhappy. Let not teachers so conduct themselves that they may allow others to regard their relations with the taught as having a purely economic basis, where the boys must get their money's worth: they must so live that they would be honoured members of society, real directors of youth, true makers of men, looked up to for advice and guidance by all around them, loved and respected by young and old alike. The only purpose of politics which helplessly drags so many of us in its net and from which we pant to be free, is that we should get the power and opportunity of building up our own all pervading system of edu-

cation for the proper training of our citizens in the varied walks of life, so that we may as a free people, make our own contribution to world-thought and world-endeavour. Our schools if only we knew it, are the real foundations on which the country's future greatness can be builded; and our teachers, if they would only realise it, are the true architects of India's future destiny.

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# EDUCATIONAL RESEARCH IN INDIA

BY

DR G S KRISHNAYYA, M A , Ph D

The survey of Training Colleges made some time ago by the writer, as Secretary of the Section on Teacher Training, Research and Experiments of the All India Educational Federation, revealed that the vast majority of the Colleges considered themselves ill-equipped and unprepared for undertaking educational research, that only a fourth of the Universities awarding Teaching Degrees had instituted a Research Degree as well, and that the annual achievement of these in the way of research was almost negligible.

## The Present Situation

The disclosure is distressing but the explanation is not difficult to discover. The whole time, energy and thought of the staff is taken up with putting the apprentices through the operations which are expected to render them expert in their craft. The one year's course (involving in some cases no more than 6 or 7 months' college work) with its endless requirements—*theoretical and practical, physical, social and mental*—leaves little room for anything beyond the teaching or the learning of the tricks of the trade. 'No time to stand and stare'. The Training College seems meant for *training* teachers and it has to go at it, if the requirements are to be met, like a horse in blinkers. While it is still true that most private and Government colleges have no one with experience in educational research on their staff, even those better manned find themselves in no better position for fostering research. Neither the candidates nor the professors have the necessary margin for the purpose.

True, certain Universities have instituted the M Ed Degree and permit students to work privately and submit theses for the degree, but the rate of research work is disgracefully slow. Even if the atmosphere in the colleges should be favourable, the professors recognised for the purpose, it has been found from

enquiry and experience, have little mental leisure after the daily grind has been gone through. And the students (granting what can't be granted—that they have the technique and can secure the materials) being engaged in full-time jobs, can do little continuous and concentrated work to produce perceptible results. Small wonder that the enthusiastic candidate withers away like the plant in the parable, fighting a losing battle on thorny soil. Besides, no man can serve two masters and do justice to both. The all too common regulation permitting candidates to prepare theses privately might, in the case of an enthusiastic researcher, amount to abetment in, if not instigation to neglect of duty. The inevitable has already happened in two of the four Universities—the degree has never been conferred in one case and not for the last six years in the other. In the other two cases, it is only too early to pronounce a verdict.

It would not be true to fact, however, to say that nothing along this line has been done by any training institution. The Dacca Training College, under Dr. Michael West's direction, did produce some theses. Vocabulary Tests, Intelligence Measurement, Word Frequency in Bengali, Achievement Tests in the different subjects, Reading Interests of children at various stages, Marking and Examinations, are a few of the subjects tackled. But it must be noted here that West's post-graduate candidates were full-time residential students, not part-time—and this fact supports the general contention regarding the importance of undivided attention as a condition precedent to effective research work.

The gloom of the situation in the Training Colleges *vis-à-vis* Educational Research is not relieved by the existence of other provincial or national bodies devoted to work of this type. It is incredible, but not the less true for it, that in the year of Grace 1938, there is not a single Bureau of Educational Research run by either the University or the Department of Public Instruction of any State or Province in the sub-continent of India. If there is one, it has not yet made itself felt.

The research work that is being done now-a-days is mostly private and personal, therefore sporadic and spasmodic. Individuals with a passion for investigation are working on certain problems. No organization backs their enterprise. Recognition comes occasionally, but their undertaking being unofficial, their findings often remain unused, unpraised and unpublished. Love's labour lost! Few people outside their circle know anything about their splendid achievements and no fellow-worker is benefited by their experience.

## The Case for Research.

These facts silently but eloquently proclaim that India has not yet understood or accepted the importance of research in matters educational. Diagnostically considered, they indicate the necessity for making out a case for the promotion of educational research in India.

Progress, it seems to have been forgotten, depends on research and experiment. Without adequate testing and investigation there can be expansion but there can be no assurance that it will be on lines that are safe and desirable. In the absence of this guarantee no move should be made. It is because this has been lost sight of, that there is fabulous waste, inefficiency and misdirection in many matters connected with Indian Education.

This leads one to the second consideration, *viz.*, that India is too poor a country not to try to secure the support and guidance which can come only from tested theories. With so narrow a margin even for the necessities, she can ill afford to squander money on methods and schemes of doubtful value. Proved efficacy should be the basis for any programme of action. Therefore, so far from being a luxury, the encouragement of research and the collecting of useful information is a measure of indispensable and long distance economy. The Duke of Wellington is reported to have said "I haven't the time not to do the right." We in India might add that we haven't the money or the energy or the time not to do the right! Research gives the guarantee of demonstrable success.

In this matter, Education might well take a leaf from the other sciences. It is an accepted principle elsewhere that prior to large scale adoption of a method or procedure, experiments should be conducted in the laboratory under controlled conditions. Various factors are introduced and their effects studied. For lac and paper, for soils and sugar, for cotton and cattle-breeding research is recognised as essential to improvement and funds are made available. Surely human beings are of more value than they! The Jubilee Celebration of the Indian Science Congress, with its many sections and the astonishing achievements of the different sciences and their epoch making application to human needs, should serve to point out how far behind lags education. It is no revolutionary propaganda therefore to suggest that the example of medicine, engineering, agriculture and the veterinary science be followed and that the failure to do so will appear only like another symptom of educational backwardness.

Further encouragement to launch on programmes of national and provincial research is afforded by the splendid achievements of the Bureaus and Institutes of Research and Counsel of other countries. The United States, that country which we are always being told worships Mammon, that hard-headed, business-minded country, leads the world in Educational Research. The National Society for the Study of Education, the Bureau of Education of the Department of the Interior, the State Institutes of Research and the Research Departments of the various Universities and Teachers' Colleges, to mention only a few, and the Funds, Trusts and Foundations for Research, prove that America is convinced that Research pays in dollars and cents.

Britain, which has now begun to think of Education as a science, is carrying on an increasing volume of research in a decentralised manner through some of her county councils, universities and special committees, through Vocational Guidance Bureaus and Adult Education agencies. France, Germany, Russia and Italy declare by their practice that increased efficiency justifies the expenditure. The National Institutes of Australia and South Africa preach the same moral. The poor countries of the Orient, Japan, China and the Philippines, tackling their problems through their Research Bureaus and Institutes, have found that money spent on experiment and investigation is an investment which yields large returns and that the intensive study of a minute subject saves time, money and energy in the long run.

If all these arguments are not enough, if it is nothing to India that advance in the desired direction depends on first proving all things, if considerations of far-sighted economy cannot urge a poverty-stricken people to the scientific verification of procedures, theories and opinions prior to general advocacy and adoption, if the example of the Sciences, pure and applied, and of the more advanced countries does not compel like action, then, at least the motive of self-respect should stimulate enthusiasm for the original and independent study of India's peculiar problems. India cannot remain for ever a dependency in Education, a "second-hand nation" as Dr. C. R. Reddi put it recently. That means an end to her parasitic existence and a determination to stand on her own feet. All the more is this necessary when it is recalled that many of her problems are unique and are shaped by her special social, political, economic and physical conditions. So it is really not a matter of choice. Undoubtedly there are a number of problems which India shares with the rest of the world, human problems. For these she must avail herself of the findings of others. In addition, instead of

being content to be a sleeping partner, she should endeavour to contribute as far as it lies in her power, to the common stock. But in matters peculiar to her, she must in Education as in the other sciences and professions, look for a solution which will be her very own. One of the British scientists did well therefore when on landing in Bombay, he warned India against borrowing or adopting wholesale plans and methods from Britain or elsewhere—evidence of a new attitude indeed. Besides, each Province or State has its own needs and difficulties and these call for different and detailed study. India's coming of age, then, can be best celebrated by her resolving no longer to depend on the crumbs which fall from other people's tables but, on the contrary, to work out her own educational salvation with courage and confidence.

Having thus seen that the present situation is far from satisfactory and that fostering research and experiment is not a luxury but a desperate national necessity, it may be worth while now to consider briefly what might be done bearing in mind our peculiar conditions.

## Possible Steps

### (a) University Departments

At the outset it was made clear that Training Colleges devoted to the job of turning out pedagogues in half a year, are not congenial auspices. There is neither the time, nor the energy nor the mind on the part of either student or professor. It must have been evident also that the essays assigned as home-work are invitations to disappointment, and that unless he is emancipated from the regular training work, the professor cannot give candidates the guidance they need.

That put positively means that Research students must enrol as full time students and work under the supervision of their professor at the University or elsewhere and that the Research Professor must not be saddled with pedagogical drilling. Research guidance then should be concentrated in the University and not be spread ineffectively over the different colleges. It would be unthinkable for individual colleges to provide the necessary facilities, and duplication would be wasteful. The University is the logical place also because it is already the centre for various other research courses and many of the requisite facilities are already available. Take the School of Economics or Sociology or the Departments of Politics and Indian History,

the Post-Graduate Department of Education, or Department of Educational Research is a University concern.

Indian students are prepared to go abroad and give themselves exclusively for two or more years to their research subject. And it is remembered that the research degree is necessarily meant for the exceptional rather than the ordinary teacher, and that research work that will consummate in a degree is unlikely under other conditions, this whole-time devotion for two years to a special subject should not seem unreasonable.

(b) *Research Bureaus.*

This is so far as the advanced work of post L.T. or B.T. is concerned. But there is need for agencies or bodies which are devoted exclusively to the intensive study of problems and the evaluation of processes, and are not necessarily concerned with University degrees. As in other countries and in other sciences, so here, Bureaus of Research and Counsel should be organised which will serve as educational laboratories and distributors of information. It should be possible for persons doubtful of the value of a process or a theory to refer it to this Institute for expert and tested opinion. When guidance is needed as to how schools of a particular type may be started, it should be available somewhere. Should the experience of other Nursery schools or other Dalton schools be required by a struggling enterprising, far-away educationist, he should be able to turn to some centre for enlightenment. Much overlapping, duplication and wasteful experimentation can thus be avoided. On its own, too, the Bureau might proceed to conduct or encourage experiments. It might prepare tests and standardise them for general use. It might establish age norms and scales for various skills and achievements. It could make or suggest surveys along various lines. It might go into questions like examinations, marking, word frequency, and the working out of new type tests for the various school subjects. It should be able to throw light on such persistent problems as illiteracy, adult education, sex instruction, vocational guidance, compulsory attendance, medical supervision, handicrafts in school, education films and the like. The best experience, not merely of the various provinces, but of the other countries, should be made available to the eager inquirer. The Institute might be referred to by a would-be research student for a suitable problem and research students might be associated with it. There must be centres to hearten the fainting, to enlighten the struggling and to guide the erring. In a huge country like India it is impossible for any individual or group

of individuals even with the best will in the world to collect, collate and co ordinate the results of research and experiment, much less to foster or sponsor such undertakings or broadcast information of a useful kind. It is the work of a Bureau or Department financed by Government.

*(c) Central and Provincial Institutes.*

A Central Institute is a long felt necessity. It could work in cooperation with the Educational Commissioner. Indeed, whatever is being done now could be made much more effective and consequential. The surprise is that educational advisers to the Government of India have had to carry on until this year and to a large extent still, without the assurance which comes from knowledge of the achievements along different lines of the various parts of the land and the results of actual investigations into the country's problems. The Advisory Board, now revived, should have at its disposal all the information which can be collected, and be in a position to fortify its opinions by actual research and investigation conducted under the auspices of the Bureau or Board. It should also aim at becoming a distributing centre for educational guidance and information.

Even that is not enough in a country of this size. Without the active contribution of the parts even the centre cannot be well supplied. The States and Provinces should generously invest in this labour saving, time saving and money saving device. Their special needs have to be met and special investigations into their individual difficulties will be necessary. In trying to manage without such a Bureau of Research and Information they seem to leave themselves open to the criticism of having been penny wise and pound foolish. They should also try and secure private donations and endowments from individuals seeking new avenues for their philanthropy. It is ruinous, financially in every other way, to try to get on as though darkness were no handicap and ignorance no drawback. If it is true that we learn from experience, why not ensure more rapid progress and more economical progress by learning not only from our own experience but also from the combined experience of many others and their experiments? That way lies wisdom. That way lies economy. That way lies certain progress.

### SUMMARY

To summarise, India is an educational back number. She has been obliged to grope blindly and stumble at every step.

The light of successful experience in the laboratory and out in the world is what is needed. Training Colleges are otherwise engaged. Universities and Government Bureaus in the different States and Provinces can enlighten her and in many ways enhance the usefulness of a well-equipped, long overdue National Bureau of Research and Counsel. Its absence points to extravagance the country cannot stand. The next step in Indian education must be the establishment of such University Departments, and Provincial Institutes and at the centre an effective well-equipped, Board radiating light to the distant corners of this vast land. And it may be pointed out that this idea received the enthusiastic approval of the Wardha Educational Committee.



## THE RESOURCES OF THE ENVIRONMENT AS MATERIALS OF INSTRUCTION

BY

DR F G WILLIAMS

*Note*—This article is the fourth of a series which endeavours to study the educational resources in the environment of rural children living in the area contiguous to Ushagram. Formal education is so futile largely because the teacher seldom looks beyond the four walls of the classroom for materials of instruction.

### Communication

One would think that news would travel (if at all) with slowness and great difficulty among an illiterate rural society where newspapers and radio are practically non-existent. In certain parts of Africa, news is passed from village to village by the beat of great drums. In India and Bengal the "grapevine telegraph" is efficient to the point of being miraculous. During the non-cooperation movement when Mr Gandhi was at the height of his political popularity, he made a trip across India. It is said that the railway right of way for the entire distance was lined with rural folk cheering and trying to get a glimpse of their "Mahatma". One could understand the presence of thousands at each railway station and train stop, for the news could be flashed along to these places, but the crowds along the track through the sparsely populated open country and jungle have a good example of this phenomenon. Students resident in Ushagram, taken ill and removed to the school hospital, are visited by their parents almost before they are settled in the hospital—long before any communication could be delivered even by special runner. One could continue with examples of the efficient working of communication. Illiterate people must rely entirely on word of mouth for their news of the outside world. Closely related to this method of communication is the "chit". In rural areas people do not have telephones, and when they wish to send a message they send a runner with a verbal or written "chit". If a literate person is sending a message to an illiterate friend, he will address the message to someone in the village who can read, and ask that person to pass it on. The word "chit" has become so widely understood that it has entered the English language.

The post and telegraph system is maintained as a responsibility of the Central Government. The enormous task of delivering letters and post cards to the 700,000 villages of India through the 23,888\* post offices, cannot be overemphasized. This postal service is accomplished by thousands of runners who brave the dangers of flood, wild animals, robbers, and disease to collect and distribute the mail to the most

\* India 1930-31, Government of India publication, pp 271-276

isolated villages. Many villages have only weekly service. These villages are often many miles from the small, poorly equipped but efficient post office. Enough runners are supplied to each post office to service the villages within the area. A telegram may be sent from any post-telegraph office (or from any railway station) and will be wired to the telegraph office nearest the addressed destination from which it will travel with the regular post. This means that telegrams are almost as slow as letters. This is, however, only the case in isolated rural areas. Between telegraph offices the service is usually very fast and delivery within the office areas prompt. For nine annas a telegram can be sent to any part of India.

The telephone is found only in the larger towns at the post office, police station, court, railway station, bank or offices of large commercial firms such as coal-mines and manufacturing plants. The telephone is a Government monopoly. Costs of installation and rent make the telephone impossible even for the European resident, and he falls back on the "chit" service. Long distance calls are possible from any telephone. One can talk for three minutes between Asansol and New York City for Rs. 88.

The radio had at first a very slow development in India, due perhaps to static interference which made the long wave sets useless at certain long periods of the year. Since the introduction of short wave broadcasting and receiving sets, the development of radio has been phenomenal in urban India and among the European residents. All broadcasting is closely supervised (and subsidized) by Government. Amateur broadcasting licenses may be secured under certain conditions but amateurs receive no encouragement. Receiving sets are taxed Rs. 10 per annum which effectively limits their use. Battery sets are expensive in upkeep and rural communities seldom have electricity. For these other reasons, there are practically no radio sets in the villages. One finds them in the homes of coal-mine operators where there is electricity. However in the towns, music companies have installed loud speakers and great crowds about the shop when an important football match is being broadcast from Calcutta. Broadcasting stations are maintained by the Government at Calcutta, Madras, Bombay, Lahore, Lucknow and Peshawar. Experiments in rural broadcasting have been conducted by the Agricultural Institute, Allahabad, Punjab Government and the Bengal Government (Midnapore District), but as yet this is still very much in the experimental stage (in 1938).

The newspaper, so powerful a medium of integration in Western countries, finds a very limited scope in Bengal. There are a number of daily newspapers published in English and in Bengali and Hindi from Calcutta. These papers are read by the literate-educated, largely those in the professions and the Government. Very few papers find their way to the villages. Subscriptions by post are expensive, and even the cost of weekly editions is prohibitive for the farmer who depends on the land for his income.

*Communication experiences of rural folk.*—Listening to news brought into the village by visitors; Passing on news by word of mouth; Carrying messages or chits; Writing letters or chits; Mailing letters at the post office; Receiving letters from the postal runner; Reading letters;

Watching the runner receive and deliver mail, Receiving and sending telegrams, Listening to telephone conversations at railway station or office, Reading occasional newspaper, Listening at radio loud speakers in town market shops

### Fishing

The fisherman is almost a social institution in Bengal where fish is considered an essential of diet for the middle classes. The Bengali Brahmin makes fish the one exception of his strict vegetarian diet and is thereby practically outcaste by the orthodox Brahmins of other provinces. The Bengali loves his fish. He would have it served at every meal if he could afford it and could procure it. The "jeli" is therefore a much respected and very important cog in the social machinery. In every village of any size there is a family of fishermen who serve the area. In the rural districts of Western Bengal river fish are seldom available. Fish are cultivated by the jeli in the numerous ponds. There are at least three types of agreement between the jeli and the owner of the pond nursery.

- (1) The owner of the pond buys from the jeli the spawn and plants them in his pond. In this case the fish are his, and he only hires the jeli to catch them usually giving one-third of the catch as wages. This is the method most often employed when the owner has a large household of 20 to 60 persons, or when the rights of the pond are owned by a number of families who share the cost of the spawn and divide among themselves the fish caught. In other words, when there is no necessity of selling the fish this is the popular method. The jeli is allowed to catch only as much fish as can be used at that time by the owner or joint owners.
- (2) The jeli pays an annual cash rental for the rights of the pond. In this case the jeli plants and cultivates the fish, selling them when they mature. This is the usual agreement made by absentee landlords or by owners who do not care for pond fish.
- (3) The jeli shares half and half with the owner. The fisherman plants and cultivates the fish, taking full responsibility for their care. The owner may take his half of fish or may demand the market price of his share.

Every member of the fisherman's family is busy all the time at all seasons. The children help weave and repair nets, the women sell the fish, the men weave nets, catch spawn, plant, cultivate and catch the fish. It is difficult to name the time of the year when the jeli is busiest. With the first rush of the fresh monsoon water (July), the fish spawn in the rivers, and the jeli is travelling weary miles from his village to the spawning grounds. Someone must stay at these locations as long as the demand continues and good catches can be made. The spawn are transported to the villages in large earthen jars. On arrival in the village the spawn is peddled for sale to owners of ponds. Other members of the family plant spawn in ponds for which they hold rights. Usually the jeli has a special pond in which he cultivates the

spawn until they grow large enough that the specie can be distinguished. Not all of the spawn is of the big fish variety. Much of the spawn will develop into a variety of minnow which has a maximum growth of three inches. When one buys spawn he does not know what he is buying—even the jeli does not know. For this reason the spawn are sold very cheaply (Rs. 2 per 1000). But after the jeli has cultivated the spawn to the size at which he can distinguish the “katli” or “rui” variety he demands Rs. 12 per 1000. These two varieties grow very rapidly in the ponds. The latter is of the carp family and grows to a size of 75 lb. The “katli” does not grow so large but is considered the better for eating. By the end of July he is selling and planting the distinguishable minnows. As the monsoon increases his work is multiplied. The ponds are overflowing with the flood and he must see that no fish escape. He usually sets bamboo traps at the overflow points.

The jeli has difficulty in catching fish during the peak of the monsoon season when rivers and ponds are full. The women peddle large minnows (culs from the good varieties) and a cray fish (chingri mach). Nets are repaired and made ready for the big fishing season (November to June). During this season the jeli goes from pond to pond making catches as demanded by the owners and as required by the family vendors. While the ponds are still full of water he uses the throw net. The art of throwing one of these circular nets is difficult to learn. The jeli stands silently in the water to his waist, swings the net over his head making it spread and land on the water in a perfect circle. A throw net is 20 to 30 feet in diameter. Later in the season when the water of the pond has fallen to a low level, the fisherman will use his drag net. This is a net about 4 feet wide and from 50 to 100 feet in length. Two men drag it slowly forcing the fish toward one corner of the pond. When cornered the fish become very active, and the writer has seen as many as a dozen large fish (4 to 8 lb.) in the air at one time as they attempt to hurdle the net and escape into the free water.

The selling of the fish is as interesting as other parts of the fisherman's work. The old women of the family act as vendors, peddling the fish in a basket carried on their heads. The fish are covered with a wet cloth and green leaves to keep them alive. The Bengali likes to buy his fish alive—then he knows it is fresh. The peddler may have only one large fish in her basket when she enters the village. All prospective buyers gather around. She takes off the cloth and proudly shows that the fish is still “benhc achay” (alive). She then holds the knife with her feet and pulls the fish through it, cutting it into portions as the purchasers wish. She cleans, scales, and finally weighs the pieces. Early in the season the price of fish may be six annas per pound falling to three annas toward the height of the season.

The jeli seldom objects to casual “pole and line” fishing by boys. Due to the fact that pond fish are so well fed it is only occasionally that one can snare a fish with a hook. The pots, pans and dishes of a large number of families are cleaned daily along the banks of the ponds leaving plenty of food for the fish. The jeli does object strenuously to another practice of the village people living near these ponds. During a heavy storm many streamlets are formed carrying the water into the pond. The small fish leave the pond and try to ascend these

rivulets. The people go out in the midst of the storm and using an old 'duti' (usual dress of the man—a length of thin cloth about 40 inches wide and five yards long) as a net, capture many of the smaller fish. The fisherman is very jealous of his trade, and keeps it a closed vocation the father passing it on to his son. The average villager who is not an owner of a pond has little to do with the fisherman and his trade except as a consumer of his produce. Village boys sometimes get a further share in the fish-lure experience by planting spawn in the flooded rice fields. They dig a hole in one corner of the field. Into this depression the fish finally find themselves as the water dries from the field and here they are easily captured. Outside the fisherman's family the experiences are limited to —

Studying and distinguishing spawn, Buying spawn, Planting spawn in rice fields, Catching fish in the rice fields (and in wells), Catching "chingri mach" in ponds, Learning various varieties of fish, Pole and line fishing, Helping with net fishing, Holding the fish baskets, Counting the fish, weighing the fish. Dividing the shares, Buying fish, Cooking and eating fish curry.

### Trading

The "doka" (store) may be found in the smallest village. Sometimes it is no more than a corner of the small verandah or front room of a tumbledown mud hut. In large villages the building may be quite grand, made of brick with iron barred windows and flat concrete roof. The supplies kept by the storekeeper vary with the size of the store and of the village, but always to be found on sale are rice, dal, kerosene oil, smoking tobacco, beeries (local type of cigarette), sugar, gur (raw sugar), salt, spices, cooking oil and soap. The storekeeper squats in the midst of the small boxes and tins which hold quantities of these articles, and weighs on a small balance scale the amounts required by the purchaser. The prices at the "doka" are slightly higher than in the bazaar or markets where the villager does most of his buying. He goes to the "doka" only in times of emergency.

The permanent bazaar or market found in the large villages is a series of dokans, each of which specializes in a certain line of goods. The Asansol (population 30 000) bazaar is a good example. There are several cloth stores, two general stores dealing in everything from hardware to hair oil, one tin shop, a rice market, vegetable market, several sweetmeat shops, two bakeries three shoe stores, two music stores, seven pharmacies (with physician's offices attached), three cinema theatres, a fruit market, a cement and lime merchant, four timber merchants, and three garages for motor car repair. This list is not complete but gives an idea of the scope of a permanent bazaar. These shops are all housed in buildings and are open every day of the week. The bazaar is a service station for a large area including scores of small villages. Here people buy articles not available in the small village doka or at the weekly market. The villager makes infrequent trips to the bazaar and often sells his rice here so that he can purchase the articles he needs. The bazaar gets most of its supplies through railway and caravan transport from Calcutta.

The weekly market is strictly a rural affair, and is held permanently in one location on a fixed day of the week. This is the true trading center of the rural folk. To this center go the products of village industry and agriculture for trade and barter. The owner of the market location often erects small sheds for protection in time of rain. He always charges the vendor rent for the use of the location. Here one can find almost anything produced in the villages. People are squatting beside their wares. The herdsman has brought his sheep and goats which are tied on a long line awaiting buyers; the Santhal has brought his baskets (of all sizes) and woven bamboo mats; others stand proudly beside great bamboo crates full of chickens and pigeons; the potter has brought all sorts and sizes of water jars, cooking vessels and grain storage vats: the weaver is there with his cloth, the confectioner with his sweetmeats, the tobacco grower with his black, sticky smoking mixture, the itinerant pedlar with his array of Japanese trinkets, the soap maker with his large balls of coarse washing soap, the truck farmer with his vegetables. All over the place (the large market will cover more than an acre of land) there is the noise of shouting and barter. People are coming with their wares, others are leaving with their purchases. An airplane view would show long thin lines of people converging at the market center. The more recent permanent bazaars are in no way affecting the weekly markets. These are still the trade centers of village folk. They are part of an ancient heritage which continues to function efficiently. The people of a village often attend more than one weekly market, and often the markets are held twice a week. Within a radius of five miles of the village there will be three such markets held on different days of the week. The Domohani market is on Wednesday; the Hirapur market is held on Saturday; the Damra market is held on Monday. Each of these markets may offer some distinctive product. The special feature of the Domohani market is its wood and bamboo products for it is near a jungle forest where aboriginal tribes people live. Here are always on sale Sal saplings for building, small and large bamboos, baskets and mats from bamboo. The Hirapur market is near an English settlement and a large industrial plant and is attended by vegetable growers and fish merchants. The Damra market is noted for its "dhenki chatta chaol" (hand-husked rice). Not all the vendors of these markets are the casual villagers who trade their products. Many of the vendors travel from market to market with their goods. These are the salesman members of artisan families who make it their business to sell the family product.

The cattle mart is a specialized type of weekly market. Cattle are not sold in the ordinary weekly markets, but in certain centers such as Lalgunj (market on each Thursday). Here people from distant points come together to buy, sell and trade their cattle. These markets are from 50 to 100 miles apart and serve wide areas. If the farmer's bullocks do not match in size, he takes them and trades one or both until he gets a matched pair. Or if one of the pair has died, he takes the remaining ox and gets a match for him. It is very important that a yoke of oxen be matched in size and strength and temperament.

The "mahajan" (merchant) from the permanent bazaar enters the village as a rice buyer just after the harvest in December. Often he has bought the farmer's crop before it has been harvested, and made an

advance to the farmer. The demand for rice is practically unchanging, but the price varies with the supply. Immediately after the harvest (if there has been a good crop) the price is at its lowest point, and these mahajans or their agents are travelling through the villages buying all the rice they can. This rice they store for sale later in the year when the price advances. The farmer has no financial resource upon which to depend. Storage is impossible for him as he lives practically from hand to mouth. He must sell at the earliest moment possible, and of course always gets the lowest price for his grain. If there is any profit to be made from the rice the mahajan makes it. Often the farmer is not able to keep back enough rice to feed his family with food until the next harvest.

The "beekriwallah" (hawker) makes his periodic visits to the village bringing to the farmer's home articles which are not available in the weekly markets. These men secure their supplies from the permanent bazaars, and sell them to the villagers at a slightly higher price. Each hawker specializes in one line of goods. The most common are cloth, brassware, jewelry, aluminium wire, honey, ghee (clarified butter) and kerosene oil. The men cry their wares from home to home.

The business of buying and selling under any of the above circumstances involves the skill of barter. The villager loves nothing more than the argument which arises over the difference of one pice between the price offered and the price demanded. The proximity of the demanded price to the lowest possible amount which will be taken by the seller is determined by the length and forcefulness of the argument. If the argument continues to the point where the buyer gets the article for the lowest price, and the vendor gets as much profit as he feels his due, then the transaction is successful and both parties are happy. The buyer may tell and retell his experience with a great show of having beaten the vendor at his own game.

The trade experiences of the villager are many and varied and fall under the following heads —

Trips to weekly markets and permanent bazaars, Selling and buying, Buying at the village doka, Bartering at each purchase or sale, Selling rice to the mahajan, Investigating the beekriwallah's pack, Discriminating between good and bad articles, Demanding fair weights and measures

# AGRICULTURAL EDUCATION

BY

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Much misunderstanding exists regarding the purposes of agricultural education. Historically, the first purpose has ordinarily been to train staff for departments of agriculture, and many persons still think of this as the sole function of agricultural schools and colleges. In the early days of the development of scientific agriculture in India, experts were brought from abroad to fill the higher positions, but it was obviously impracticable to bring in all the trained staff which was necessary. Schools and colleges were started for the training of the subordinate staff. It continued to be expected that the higher posts would be held by men with foreign qualifications. This situation still holds to a large extent, although training of increasingly high standard has become available in India.

As the agricultural colleges developed, and the standard of education rose, men trained in India came to occupy not only the subordinate positions, but some of the more important ones, both in administration and in research. With great problems still unsolved, and large areas of Indian agriculture almost untouched, the need for research workers is obvious. Judging from the experience of countries far ahead of India in the development of agriculture, the time when further investigation will become unprofitable to the nation is not yet in sight. For positions demanding higher training than is available in India, it is still desirable that workers shall have had undergraduate education here.

One function which might at first seem perfectly obvious is the training of successful farmers. Yet to many this seems obviously not a function of agricultural education, at least that of collegiate grade. To them farming is an occupation fit only for the uneducated, or those with a minimum of schooling; education gives men tastes and standards of living which cannot be supported by cultivating the soil. Unfortunately, there is a considerable measure of truth in this. Even if by modern methods the net income from farming can be doubled or trebled, the average farm will not support a family with any but a low



standard of living. It is only by farming comparatively large areas that the educated man can hope to make a good living. Less land is required for specialized types of farming, such as dairying or growing fruits or vegetables, but for these relatively expensive land is needed, and even then more than the average farmer controls.

Nevertheless, a fairly large, and increasing number of young men with agricultural training are engaging in farming, with very satisfactory results in many cases. This is, of course, particularly true of the men trained in agricultural schools, as these are generally satisfied with a lower income than is demanded by college graduates. But even college graduates are not infrequently taking to cultivation, although many hesitate to strike out independently until they have had some practical experience working for others. Of the few graduates of the Agricultural Institute who have farmed their own land, one was able to report having almost doubled the income of the estate the first year. As the number of agricultural graduates increases, there need be no serious unemployment problem if the land owners who have cultivation rights either secure agricultural education themselves, or employ those who have it.

It may be argued that a college education is not necessary to enable a man to be a successful farmer. It is true that a man who has had good training in an agricultural school, or who has studied agriculture in middle or high school, may be able to farm quite profitably, and from the financial point of view, the investment in a college education may be questionable. In a country where agricultural experimentation is advanced, and sound advice on all farming problems is readily available, there is less need for a thorough scientific education than here where so much is yet unknown. The Indian farmer has many problems which cannot be solved by reference to departmental bulletins, or by writing to experts. The agricultural graduate is in a much better position to solve these problems than is the man with less scientific training.

But there is an even more important aspect of the problem than the financial one. If education is conceived as developing the individual so that he can get the most out of life, by putting the most into it, if it is to give him a real appreciation of the world in which he lives, if it is to make of him a useful citizen of his country, then a university course in agriculture has tremendous possibilities. To those who think of culture as the study of the art and literature of past civilizations, it is absurd to speak of agriculture as a cultural subject. Yet consider for

a moment what it offers the student. In this age when science wields such a powerful influence in the affairs of men, the agricultural student learns to understand the language of science and to appreciate its methods; he studies the various sciences, not as isolated fields of knowledge, but as integrated phases, each contributing toward the understanding and control of life. Yet he must realize, as many scientists fail to do, that any control man gains over life is but partial and uncertain. He retains his sense of awe in the face of the mystery and the power of nature, his reverence for the God who conceived and created this marvellous universe.

Many of the problems before the nations today are economic, and the agricultural student learns to deal with these also. For producing a crop is only half of his task, and he must learn to do so economically, and to market it at a profit. Many agricultural prices are set in the world market, and the policies of an American President or a Japanese cabinet may determine what crops an Indian farmer should plant. Few citizens have the contribution which the educated farmer has to make to the solution of one of India's most pressing problems, the social and economic emancipation of the rural population.

History rightly plays an important part in education, but is the history of wars and of dynasties more important than the history of agriculture, of the gradual process by which, through the centuries, man has gained some measure of control over his environment, gained security, and put behind him the fear of frequently recurring famine? What an antidote for a narrow nationalism is the recognition that the crops he grows are the contribution of Europe, the Americas, and Africa, as well as of different parts of Asia, and that the methods he uses have been developed by men of every race.

If, then, agricultural education serves an important function in the life of the country, how far is this being realized by the students and their parents? A few years ago the answer to this question would have been that there was very little demand for education of this type. But the situation is changing rapidly. This seems to be partly because of the difficulty experienced by young men with a general education in finding employment, and partly because of the increasing attention being paid to the villages. The interest of the present Viceroy and his immediate predecessor in the problems of agriculture and rural life are well known. The political importance of the rural population and large efforts to improve its condition have also focussed attention on the village.

One result of this growing interest in agriculture has been a flood of applications for admission to the agricultural colleges. This is apparently greatest in the case of Government colleges, as these are better known than the private institutions, and there is a belief that graduates of the Government colleges have a better chance of securing Government service. In some ways, the number of applications for admission to a private college, such as the Allahabad Agricultural Institute, are more significant, as this college is less attractive to those desiring service. Facilities at the Institute are limited, and an entering class of about 35 only can be admitted each year, in the Intermediate course. This year only a limited amount of advertising was done, in papers circulating mainly in the United Provinces. Nevertheless, applications were received from various parts of the country, from Kashmir to Assam, to Travancore, and from Nepal and Ceylon. These totalled nearly 200, and several others would have applied had they not been told they had no chance. A few who could not be admitted to this course transferred their applications to the Indian Dairy Diploma course, where the competition was not so keen. An analysis of 183 applications, from eligible candidates yields some interesting facts.

The three provinces east of the United Provinces contain no degree college of agriculture, and from them came more than half of the applications, 109. Thirty eight applicants were from the U P, and the others were well scattered. By religion, 133 were Hindu, 37 Moslem, 11 Christian, and 2 Buddhist. In age they varied from 13 to 26, the average being 18.6. This appears to be a very high average for an intermediate course, and is explained by the fact that 39 of the applicants had already passed examinations higher than the required high school or matriculation examination, and others had studied one or two years after passing their last examination. Nor is it true now, as it probably was once, that only those study agriculture who do poorly in other subjects. Of those who had passed only the high school or equivalent examination, 20 had passed in first division, 67 in second, 50 in third, and 6 without division. Six had passed the Intermediate Science in first division, 12 in second, 6 in third and 1 without division. In the Intermediate in Arts, 5 had passed in second division and 4 in third. Five candidates had passed the B Sc. examination, two in the second division. That 60 per cent were first and second division students indicates that they were considerably above the average in scholarship.

Very interesting are the answers given to the question as to what use the candidates expected to make of the agricultural training. It is possible that some coloured their answers in the way they thought would increase their chances of admission. Only 32 stated that their object was to secure service, while 57 said they planned to farm their own land. Another 53 have land, and are willing to engage in farming, but would prefer service, at least until they secure some experience. The question was not answered definitely by 41. Some of the candidates who showed the greatest anxiety to gain admission were those whose sole object was to prepare to manage their own estates.

Although 38 of the candidates were 21 years old or older, only 19, or about 11 per cent, were married.

Here were nearly two hundred young men, most of them well qualified, wanting training of a type which is greatly needed, and showing evidence that they would be able to make good use of that training. Yet there was room for only a small percentage of them, and refusal was more difficult because very few could hope to get an agricultural education elsewhere.

This seems to indicate an urgent need for the establishment of more agricultural colleges, especially in those provinces which at present do not have any. There are now five Government colleges teaching for the degree in agriculture: those at Lyallpur, Cawnpore, Nagpur, Poona, and Coimbatore. The Khalsa College, Amritsar, and the Allahabad Agricultural Institute are the other degree colleges in agriculture. There is obviously room and need for more institutions of this grade. Financial problems make it difficult to meet this need promptly. Agricultural education is expensive, requiring the laboratories of the science college and land and equipment for a modern farm, with a wide variety of crops and animals.

Lower grade institutions are also insufficient. In the United Provinces, in addition to the two degree colleges, two institutions offer the Intermediate course in Agriculture. Both are private, and with barely the staff and equipment necessary for this course. One of them has opened Intermediate classes in agriculture only in 1938. There are also two agricultural schools operated by Government, and a few run by private agencies. Agriculture is an optional subject in the high school course, but is offered by only a very few schools. With the modern emphasis on rural life, and on education suited to the needs of the people, it is to be expected that the number of schools teaching agriculture, either as trade schools, or as general schools with vocational

courses, will be greatly increased. This in turn will call for more agricultural graduates, as teachers and inspectors.

Agricultural education has made a good start in India, but it is only a start. There is need and demand that it be greatly expanded. Will those who pay lip service to the cause of rural development see to it that financial difficulties are not allowed to obstruct progress in this extremely important part of the programme?

## OUR TASK

I wove one time a lovely piece  
With shimmering silken thread;  
The pattern was so intricate,  
My heart was filled with dread  
Lest I should skip one tiny string,  
Or knot it here or there,  
Spoiling the plan prepared for it  
And mar its beauty rare.  
More precious far than any cloth  
Of woven silk or gold  
Are boys and girls we have in trust,  
To lead and teach and mold.  
May we with earnest, Godly care  
Weave in the good and pure,  
Help build the pattern meant for them  
With things that will endure.

SIGNE J. HANSON

## TRUANT

He stayed so long in the meadow  
Lingered so long in the wood,  
We wouldn't have been at all surprised  
If, with a leather hood  
Or pointed ears edged light with fur,  
He had returned again,  
With strange, far dreaming in the eyes  
Dark as a smudged blue stain.  
But he came back at twilight  
Ravenous and himself,  
And not a thing about him  
The least bit like an elf!

ELEANOR ALLETTA CHAFFEE.

—*From Parent-Teacher.*

# CINEMA AND JUVENILE DELINQUENCY

BY

SHEIKH IFTAKHAR RASOOL

It is difficult to enter into a frank discussion of the influence of moving pictures upon modern youth without being misunderstood. After having studied the subject for some time, I cannot agree with what seems to me to be the extravagant claims of some of the critics of the movies. I refer to those who seem actually to insist that most crime among modern youth is due to what is shown in motion pictures.

While, of course, some young people have doubtless been encouraged in delinquencies by what they have seen in the movies, the same thing might be said of what they have read in the newspapers, magazines or books.

A very good argument could be made against the use of automobiles, because there isn't any doubt that the freedom they have brought to modern youth in bringing them together under conditions, that without chaperonage in past generations would have been considered shocking, has contributed probably more to sex delinquency among youth than any other cause. When we add the frightful toll of the dead and wounded thousands of youth from the reckless use or misuse of this useful contribution that the machine age has given to civilisation, we might, in the interest of morality, find as much cause for boycotting automobiles as we would find for boycotting movies. And I am not saying that the boycotting of certain types of moving pictures would not be a very good thing, for I have given generous credit to the good influence of religious and ethical organisations who have in many cases justly opposed the evil influences of some motion pictures by resort to just such a remedy.

## Good and Bad Films.

Good or evil is a matter of relativity. It is comparative. If motion pictures are to deflect from nature the face of virtue, they must also show the image of vice. To make virtue lovable and vice despicable, we must know what they are. We all admit there are decent and indecent, acceptable and unacceptable methods by which this ought to be done. Yet, it must be done or there can be no lessons from life, there can be no strengthening

of character. By no system of wet-nursism can you solve the problem of delinquency or crime by hiding bad things or the truth about them, or by depriving children of the right, under proper conditions, to see, to hear and to know what they are.

They may be worse off if shielded from knowledge of evil or spared any contact with it. They will be better and stronger if wisely familiarised with evil in order to know how to avoid it—or, facing it, to conquer it. ‘Vice is a monster of such frightful mien, that to be hated needs but to be seen.’ And, of course, with equal truth there follows the warning as to what will happen if such truth is perverted. If youths are to learn to hate vice—to triumph over it rather than that it should triumph over them—we of the older generation must know how to wisely teach youths the truth about vice and crime.

### Service of Motion Pictures.

Nothing in the last fifty years of the most eventful history of all time has perhaps done more to reduce sin and crime and add to the happiness, education and progress of the human race than motion pictures, and if the right-minded intelligent people will support the producers in giving us wholesome amusement they will certainly do more in this regard in the years to come.

The movies are going to do more than any other agency to prevent the greatest of all crimes, horrid war. Through motion pictures all nations, peoples, races and creeds, all speaking the same language of the movies, are being brought into concord, acquaintanceship and understanding. And when they know and understand each other, they will love and cease to hate each other and war will be no more. It is a real league of nations in binding them together through seeing that they are all just the same as each other—that there are no bad people and no good people when properly understood, but there are bad things and good things as they reflect through the bodies or behaviour and conduct of people, depending on causes, which as yet we know little about, and that the great lesson of life is to learn now to wisely fight evil more and people less.

Mankind has conquered all the reptiles and the wild beasts that threatened his mastery of this planet. Why? Because, primarily, he could see them, because they were known to him. But he hasn't conquered all diseases that remain to threaten his domain. And why? Because it is mostly the unseen beasts—the bugs, parasites and germs just now beginning to be seen. And with evil and disease, the movies will do more than all else besides to make them real, to make them known.



### Greatest Educator.

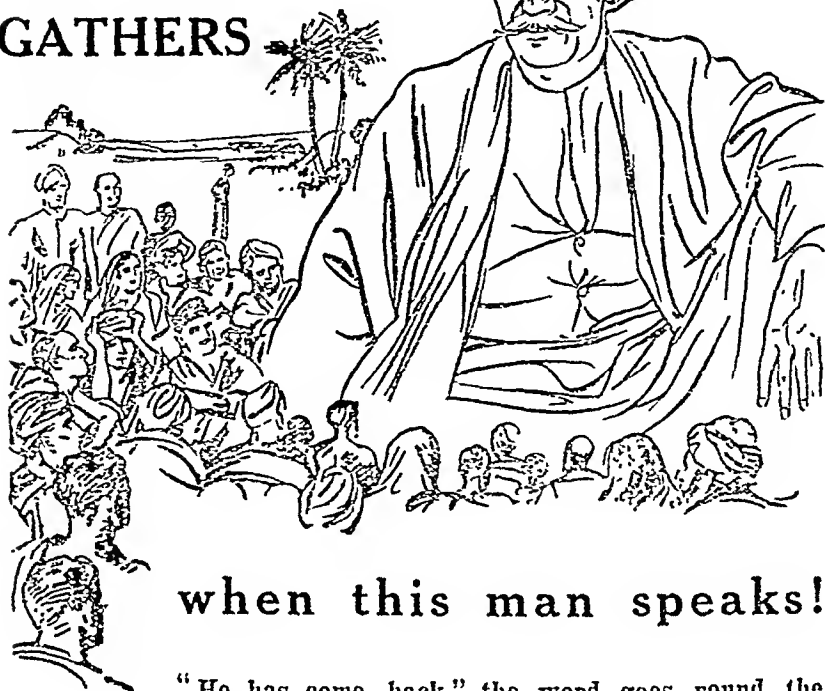
It is thus the greatest educator the world has ever had—the visual educator

And when all things are seen and known to man, he becomes for ever the undisputed sovereign of the world. Through visual education the average child of twelve is in the future to know more in academic education than the present college graduate. Largely through the movies, among the future great inventors of the world, we shall behold children from ten to twenty-one years of age.

Viewing the situation from all angles, there seems to be no good reason why the motion picture industry, with all the money and facilities at its command, cannot be called upon to produce a generally higher level of pictures and held to strict responsibility if it falls below that level. There is no limit to the heights to which the industry may climb. Movies in the past have always been money makers. If crowds filled the theatres when cheap and tawdry movies are exhibited, there is every reason to believe that when the outstanding productions will appear the halls will be full again, and with educated classes—more than has been the case before.

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## THE VILLAGE GATHERS



when this man speaks!

"He has come back," the word goes round the village—a traveller has returned. A crowd quickly gathers. He answers their eager questions and tells them of the glories of the country in which they live, yet know so little of. The people marvel: a short while ago he was just an ordinary man, now he stands out from their midst, envied and admired. A man of wisdom; one who has travelled much.

*The* **RAILWAYS**



INDIA'S CHEAPEST TRAVEL SYSTEM

# INTELLIGENCE AND ITS MEASUREMENT

BY

S M MOUSIN, M A

*Government Research Scholar in Psychology and Lecturer,  
Patna College*

*(The first and the second articles of the series appeared in our  
September and October issues respectively)*

## III THE HINDUSTANI GROUP TESTS OF INTELLIGENCE

The new orientation supplied to education and industry in the west through the evolution of the techniques of mental measurement, had its influence felt here in India as well. But no sufficient advance in this direction has yet been made. Sporadic attempts have been made in different parts of the country to formulate and standardise tests of intelligence, so that by now quite a good number of tests are available. But none can be compared in scientific accuracy and precision to the European and American tests. A few of these, quoted by Jha,<sup>1</sup> are stated here. The psychology department of the Christian College, Lahore, issued a Hindustani Binet Performance Scale. But the sample of the population on which the standardisation has been made is too small to have any real representative value. It includes only 929 cases. In Benares the Hindi Simplex Group Tests are being tried. But the area covered by the test is too wide, extending over East United Provinces to Rajputana and Central Provinces. The result of such an extensive experiment is that many important local conditions have been disregarded, thus, lowering the efficiency of the tests as measures of intelligence. In the university of Madras some researches have been carried on in this connection but they are not very systematic. In Etawah, in the United Provinces, some work is being done on testing Hindi-speaking normal children. But the tests used put undue emphasis on geographical and arithmetical ability. Jalota has issued a Group Test of Intelligence from the D V College, Lahore. But the work is, so far the writer's information goes, still incomplete. Group Tests of Intelligence have been designed

<sup>1</sup>Jha B N., *Modern Educational Psychology*

in Bengalee by P. C. Mahalanobis. But as no result based on the tests has come within the writer's knowledge, he is not in a position to make any remark on them.

Impressed by the want of a good test in Hindustani, the writer started his research, two years ago, on the formulation and standardisation of group tests of intelligence suitable for Indian school students. The reason for selecting the group tests is to be found in the relative advantages enjoyed by the group tests over the individual tests, as stated above. The writer encountered many difficulties which at first gave the impression of stumbling-blocks, but were, fortunately, later surmounted. Conspicuous among these have been the language of the tests and the ascertainment of the testees' correct ages.

The difficulty regarding languages arose from the dearth of commonly intelligible words in Hindustani for conveying abstract ideas and relations. This deficiency owes its origin to the prevalence of a foreign language in this country, *viz.*, English, not merely as the medium of instruction in schools and colleges, but as a vehicle of all transactions made in the different spheres of the life of its people. As a result of this condition the average vocabulary of a native of this country in his indigenous language is naturally much smaller as compared to that of a European in his mother tongue. The writer, in order to ensure the highest 'g' saturation of his test, had to confine his choice within this small range. However, in spite of working under this handicap, he has been successful in embodying his tests in the most widely understood Hindustani. The words used in the tests are, thus, within the vocabulary of the normal children of the ages for which the tests are meant. In this way the influence of the 'verbal' group factor, which, as Catell remarks, "may be largely a matter of vocabulary familiarity,"<sup>2</sup> has been attenuated. The correlations obtained amongst the different sub-tests of the writer are, therefore, due to their common saturation with the 'general factor,' 'g,' and not to the presence of an overlapping group verbal factor.

Another difficulty and by far the more serious one, related to the ascertainment of age. In European countries, where parents celebrate the birthdays of their children, every boy is expected to know his age. But here in India it is not customary to celebrate birthdays. The Indian boy therefore knows his age only approximately as given to him by his parents or to others in his presence. The parents take secret delight in recounting the

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<sup>2</sup> Catell, R. B., *Br. J. Psych.*, Jan. 1936.

age of their children, as the ordinary tradesman, who does not keep his business account, enjoys in recounting before others the increase he has effected in his investments. Thus, but for this inborn tendency in the parents, the child could not have known his age at all. But still the boy's knowledge is only approximate, and hence not reliable by itself. The writer had therefore to tap other resources. One of these was the boy's age as recorded at the time of his admission. But this too was not a sufficient proof, for, its veracity is itself quite doubtful, as has been pointed out on numerous occasions by several educational experts, the Indian parents have a special fascination for lowering, deliberately, the age of their children at the time of their first admission into a school. But fortunately few parents are keen about keeping a record of this false statement, and like all false reports are prone to forget it. The result is that if in future they are asked to restate their boys' age, parents who have deliberately concealed the true ages, are, more often than not, unable to give the age recorded in the admission register. Taking advantage of this situation, the writer required the parents and guardians to restate the age of their boys on age slips issued to their wards. In this way if the parents' version tallied with the records in the register as well as with the boy's own version, then the probability regarding the correctness of the age was sufficiently high. But the writer was not content with this. He compared all these findings with the class teacher's estimate of his pupil's age. In this way relying on four different resources the writer was able to discover something dependable regarding his testees' age. In computing his results the writer left out of account all those cases which showed some discrepancy among the different versions.

In the first choice of test items the writer did not make an *ad hoc* selection. He was guided primarily by Spearman's account of the nature of intelligence, as stated above. Thus only those tests which depended upon the principle of education of relations and of the absent correlate were selected. Tests depending on the exercise of memory and reproduction of acquired materials were excluded. Also tests involving the influence of some of the broad group factors vitiating the amount of the general factor were disregarded. The writer also received some guidance in the choice of his tests from Hamid's 'Effective Factors In Mental Tests'.<sup>1</sup> In the final selection of his tests, the writer used the criterion of 'g' saturation of his different sub-

<sup>1</sup> Hamid 'Effective Factors In Mental Tests,' *Br J Psych.*, 1926

tests. Thus out of 10 different types of sub-tests only 7 which showed specially high 'g' saturation were finally retained.

The writer's tests are of the selective type, and not of the inventive, *viz.*, that the testee has to select the right answer from others accompanying the test. The inventive type of tests, on the other hand, states only the questions and the testee has to think out the right answer for himself. The response, therefore, depends as much on the intelligence of the testee as on his ability to retain previously learnt responses. But memory or retentivity is a special factor whose 'g' saturation is very low; according to one experiment not appreciably above zero.<sup>4</sup> Thus as Spearman says, "All the available evidence indicates that 'g' is exclusively involved in education and not at all in bare retention."<sup>5</sup> In the selective type the testee discovers the appropriate relation between the given fundamentals and out of this issues the discovery of the required fundament conforming to that relation. The testee has not got to search his memory for this fundament but merely to see one of the suggested answers in a new light and select it. Moreover, the selective tests are purely objective and hence are not vitiated by the personal factor of the examiner.

The writer's tests, examples from which are given below, consist of seven different types of sub-tests, each containing a fairly large number of test items:—

1. Synonyms Antonyms:—

- (a) Juda Juda—Chhitir Bitir . . . . Ultá—Aik.
- (b) Uljhana—Suljhana . . . . Ultá—Aik.
- (c) Hāth Dhoa Laina—Dhaaras Rakhna . . . . Ultá—Aik.

2. Best Answer:—

- (a) Agar koayee tumháree baráyee par tumsay daah rakhkhay toa tumhain kaya karná cháhiay:—
  - O. Ussay bhee daah rakhnee chaahiay.
  - O. Ussay milná julná chhoar dainá cháhiay.
  - O. Iskee parvāh naheen karná chahiay.
- (b) "Doohtay koa tinkay ka sahaara," iska matlab yeh hai kay:—
  - O. Doohtaa aadmee tinká pakar kar bhee paar hoa saktá hai.

<sup>4</sup> C. Spearman. Abilities of Man.

<sup>5</sup> *Ibid.*

O Aadmee thoaray saharay say bhee doobnay say  
bach sakta hai

O Naameedee kee haalat main thoara sahra bhee  
bahut maaloom hoata hai

### 3 Classification —

(a) Baal, oon, par, ghans, roaan

(b) Pahar, payr, phool, ghar, nuddae

### 4 Analogy .—

(a) Loaha Bhaaree Kaag  
boatla, goal, halka, tairna

(b) Neend Maut Peetal  
Loaha, dhaatoo, soana, loata

### 5 Logical Selection —

(a) Kapra (Charkha, Rooyee, Dhaagá, Beenavat, Kurtaa)

(b) Aadmee (Munli, Baal, Gardan, Kapra, Daant)

### 6 Completion —

(a) Agar kooyee aadmee jaldee main ho toa wuh apna  
kaam—karta hai  
hooshiaree say, aqalmondee say, phurtee say,  
achchee tirah

(b) Aadmee—khaa kar bhee jee sakta hai  
bahut, bhaat, thoara, panee

### 7 Inference —

Pahla tamasha doosray say kuchh achha tha, teesra doosray  
say bahut bura tha laikin chauthay kay etna bura na tha Kaun  
tamasha sab say achha tha? Pahla?, Doosra?, Teesra?,  
Chautha?

1 Disconnected—Scattered

Same—Opposite

Disarrange—Disentangle

Same—Opposite

To renounce hope—To entertain hope

Same—

Opposite

2 If someone is envious of your position what should you  
do with him?

You should also be envious of him

You should not mix with him

You should not mind this

"The drowning man catches a straw," it means that—

A drowning man can save himself by catching a straw.

With a little support a drowning man can be rescued.

A little help means much in despair.

3. Hair, Wool, Feather, Grass, Fur.

Mountain, Tree, Flower, House, River.

4. Iron: Heavy:: Cork:

Bottle, Round, Light, Float.

Sleep: Death:: Brass:

Iron, Metal, Gold, Bowl.

5. Cloth (spinning wheel, cotton, yarn, texture, shirt).

Man (mouth, hair, neck, clothes, teeth).

6. When a person is in great haste he does his task—

Carefully, Wisely, Quickly, Well.

A man can live on —. Much, Rice, Very Little, Water.

7. The first trick was a little worse than the second. The third was much worse than the second, but not so bad as the fourth. Which trick was the best? First, second, third or fourth?

A stock objection raised against intelligence tests is that the tests merely measure quickness or alertness and not cognitive power or intellectual capacity as claimed by the framers of mental tests. The pioneers of mental tests are themselves to a very great extent responsible for this prejudice; for we find in most tests, specially the American ones, that too much premium is put on time allowance. Thus one account of intelligence tests lays down the general principle that "It should not be possible for any child to complete a group intelligence test in the time allowed."<sup>6</sup> It is not unnatural then for the layman to suspect that the tests are measures of individual differences in quickness of response and not in power or goodness of response. To clear this doubt extensive experiments have been carried on. Spearman has quoted a few of these and concludes that both speed of cognitive process as well as the power of cognitive response depend upon the general factor, 'g,' and "neither of them constitutes a group factor or produces specific correlation."<sup>7</sup> Bernstein has supported Spearman's conclusion by showing that

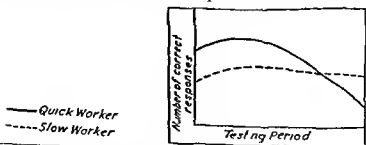
<sup>6</sup> Allen Hunt, E. P., and Smith, P., *A Guide to Intelligence Testing*.

<sup>7</sup> *Op. cit.*



intelligent individuals are quicker than the unintelligent ones<sup>\*</sup> The writer also has tried to clear the doubt arising from this controversy. In administering his tests he allowed as much time to his testees as to enable almost the total group to complete the tests. In this way the factor of speed was totally eliminated and the tests measured only goodness of response. But this departure from the usual procedure did not prejudice the efficiency of the tests for still the results are quite satisfactory. All the sub tests used in the battery are highly saturated with 'g'. The writer's tests, thus, supply a conclusive proof of the claim made by psychologists that intelligence tests do not measure merely individual differences in quickness or speed of response but also in goodness or power of response.

An objection may be raised to the larger time allowance on the ground that the quick working testees are penalised in such tests by 'having to dally while the duller ones catch up'. But in the writer's opinion this procedure is more useful than that of the shorter time limit. For in a test allowing sufficient time the quick workers are afforded an interval of rest before they take up another sub test in the battery. This keeps the efficiency of their work uniform all the time they are undergoing the tests. This follows from the common observation that a quick working operation is more readily fatiguing than a slow working and hence the latter can be carried on with the same efficiency for a much longer time as compared with the former. Accordingly, the quick worker on intelligence test is liable to be more readily fatigued than the slow worker. Hence, if the slow worker's efficiency remains uniform for the period covered by the total tests, the quick worker's will naturally decline. The work curve plotted on the result achieved by the quick worker will show a gradual decline after a certain lapse of time, as fatigue supervenes, causing the curve to fall. While that for the slow worker will continue at the same level for the whole period. The following figure will illustrate this point —



\* Bernstein E., Quickness and Intelligence

This variation in the work curve of the two types of testees would not have affected their output very much if the operation were throughout of identical nature; for the quick worker would have more than made up in the first spell of work for the decline suffered in the subsequent stages. But the sub-tests in a test battery are not identical. They depend upon different types of mental processes involving intelligence. The quick worker's output then will be greater in the tests given first in order of time than in those following. In the total pool of tests, then, the preceding tests will have greater weight than the subsequent ones. No such discrepancy will arise in the case of the slow workers. In order to keep the efficiency of the quick worker uniform throughout the testing period, the effect of fatigue should be neutralised. This can be done by interspersing their total spell of work with pauses or intervals of rest, which condition is satisfied by allowing the longer time limit. The writer's opinion finds its support from the results of experiments on the ergograph, or the muscular fatigue testor, quoted by Collins and Drever<sup>9</sup> from Muscio's Fatigue.

The following tables are prepared by the writer from the scores made by fifty schoolboys, age 12, on the writer's Hindustani Group Intelligence Tests:—

TABLE I.<sup>10</sup>

		1	2	3	4	5	6	7
1. S. A.	...	...	·636	·608	·656	·485	·495	·598
2. B. A.	...	636	...	·453	·701	·560	·478	·528
3. Class.	...	608	·453	...	·541	·519	·477	·361
4. Anal.	...	656	·701	·541	...	·451	·625	·486
5. L. S.	...	·485	·560	519	451	...	·484	507
6. Comp.	...	·495	·478	·477	·625	·484	...	476
7. Inf.	...	598	·528	·361	·486	·507	·476	...

The above table shows a sufficiently high positive correlation between the different sub-tests. The tests also satisfy the tetrad equation as the largest tetrad difference ·159 is less than four times the average probable error which is ·045. The reader

<sup>9</sup> Collins, M., and Drever, J., *Psychology and Practical Life*.

<sup>10</sup> The coefficients of correlation are obtained according to the Product-moment method of Karl Pearson, the formula being  $r = \frac{\sum xy}{N\sigma_x\sigma_y}$ , where  $r$  is the coefficient of correlation,  $x$  the deviation from mean of the first distribution,  $y$  the deviation from mean of the second distribution,  $\sigma_x$  the standard deviation of the first and  $\sigma_y$  that of the second.

can verify this remark by taking any four correlation coefficients given by any four subtests in the above table and compute the tetrad differences which, as stated above, consist of the difference between the cross products of the four correlation values, or, in other words, of the difference between the products of the top right value and the bottom left value and the bottom right value and the top left value. The satisfaction of the tetrad equation is a statistical proof of the fact that the writer's tests contain the general factor 'g' which is responsible for the high positive correlation, and the specific "s's"

TABLE II<sup>11</sup>

	Test	'g' saturation
1	S A	831
2	B A	754
3	Class	620
4	Anal	810
5	L S	680
6	Comp	693
7	Inf	683

Table II indicates that the amount of the general factor in each sub test is sufficiently large, or more technically, the tests are highly saturated with 'g'.

TABLE III<sup>12</sup>

	Test	Reliability Coefficient
1	S A	777
2	B A	637
3	Class	518
4	Anal	748
5	L S	603
6	Comp	732
7	Inf	592

<sup>11</sup> The formula for correlation with 'g' is taken from Spearman's Abilities of Man, Appendix, xvi, according to which  $r_{ag} = (A' - A) / (T - A)$ , where  $r_{ag}$  is the correlation of a measurement 'a' with g, A is the sum of the correlations between 'a' and every other test, A' is the sum of the squares of these correlations, and T is the total of all correlations in the whole table.

<sup>12</sup> Obtained by means of the Spearman Brown formula,  $r_{11} = \frac{2r_{\frac{1}{2}\frac{1}{2}}}{1 + r_{\frac{1}{2}\frac{1}{2}}}$  where  $r_{11}$  is the reliability coefficient of the whole test

and  $r_{\frac{1}{2}\frac{1}{2}}$  is the reliability coefficient of one half of the test found on comparing the first half with the second half

The above table shows the reliability coefficient of the writer's tests according to the split-half method.

TABLE IV.

Test.	Correlation with total		
1. S. A.	...	...	·804
2. B. A.	...	...	·800
3. Class.	...	...	·722
4. Anal.	...	...	·804
5. L. S.	...	...	·736
6. Comp.	...	...	·755
7. Inf.	...	...	·721

Table IV shows the correlation found by the writer between each sub-test and the average total of all. The values obtained are sufficiently high and thus supply the evidence for the validity of the writer's sub-tests. Other measures of validity also yield a satisfactory result. Thus, the average correlation found by the writer between his tests and examination results is ·579; that between the tests and teacher's estimate of intelligence ·536.

TABLE V.<sup>13</sup>

	1	2	3	4	5	6	7
1. S. A.	...	·914	·953	·857	·720	·657	·882
2. B. A.	...	·914	...	·775	1·000	·903	·868
3. Class.	...	·953	·775	...	·857	·928	·774
4. Anal.	...	·857	1·000	·857	...	·671	·851
5. L. S.	...	·720	·903	·928	·671	...	·727
6. Comp.	...	·657	·705	·774	·851	·727	...
7. Anal.	...	·882	·868	·654	·731	·850	·727

Table V shows the intercorrelation between the subtests after correction has been made for attenuation. By correction for attenuation is meant that the effect of those chance or accidental errors in the two tests which lower the reliability

<sup>13</sup> The correction is made according to Spearman's "Correction for attenuation formula,  $r_{\infty\infty} = \frac{r_{12}}{\sqrt{r_{11} \cdot r_{22}}}$

$r_{\infty\infty}$  = correlation between true scores in test 1. and 2.

$r_{12}$  = correlation between obtained scores in test 1. and 2.

$r_{11}$  = reliability coefficient of test 1.

$r_{22}$  = reliability coefficient of test 2.

coefficients of both tests and thus affect the correlation between them is eliminated

TABLE VI

	Test	Correlation with 'g'
1	S A	927
2	B A	965
3	Class	916
4	Anal	918
5	L S	903
6	Comp	808
7	-Anal	865

The above table shows the correlation of the tests with general intelligence after correction has been made for attenuation

## COUNTERFEIT DEGREES

BY

WALTON C. JOHN,

*In School Life.*

In recent years, there have come to the attention of the Office of Education nearly 50 questionable institutions, some "diploma mills" pure and simple, as well as others whose courses were of little professional or educational value. And though many of these alleged universities have gone out of existence, new ones appear or old ones are revived under a new disguise.

The great expansion in adult education in the past 25 years, particularly in correspondence instruction, has created a new and wide interest in home study. In the Orient, particularly in India and China, the possession of a degree has had a high value for centuries. A number of alleged universities offering counterfeit degrees have here found fruitful soil.

One institution, incorporated in an eastern state operates primarily in India. Another institution, incorporated in South Dakota, is, according to its Bulletin of 1935: "an internationalistic independent organization, incorporated and characterized in the United States of America, devoted to the promotion of colleges in India." Degrees are granted by examination in India, and by correspondence. The fee for the full course leading to the bachelor's degree is given as \$45, for the master's degree \$55, and for the doctorate \$80.

For a consideration of \$100, a St. Louis institution not only confers the title D.D., doctor of divinity, or D.M., doctor of metaphysics, but also offers to ordain the student as a minister of the gospel without extra charge.

A peculiar characteristic of these alleged universities is the great extent of their offerings, the number and types of degrees conferred, and the extent to which their officials appear to be afflicted with "degree-itis." The writer knows an instance where two presidents of neighboring institutions of this type had conferred nearly every doctorate known to mankind on each other.

These schools are not only responsible for duping a great many innocent people, they also are breaking down respect for genuine degrees. Complaints from foreign countries through

their legations and embassies are coming in increasing numbers. Few people understand, even in this country, the lack of federal authority in these matters.

There are also people who seem willing to be duped in order to pose as cultured individuals. Many letters come to this Office showing that their authors have no scruples in buying a Ph D, an LL D, or even a DD over any convenient bargain counter.

One case came to light in a peculiar way. The writer had been invited as a guest examiner in the case of an individual who was up for his final oral examination for the Ph D degree in a well known university. The examining board, after a careful and sympathetic examination of the candidate, declined to recommend him for the degree. About six months later the candidate called at this Office and informed the writer that he had just received his Ph D from an unaccredited college which was conferring doctorates in collusion with a correspondence school which could not, under state law, confer any degree. The fee was \$50. It was evident that the individual thought that he had done a smart thing.

On the other hand, we have received a letter from a young man in Philadelphia who had spent his own earnings and the savings of his parents in obtaining a medical degree of sorts. After graduation he awoke to the fact that he was ineligible to take the examinations for license to practice. All his efforts and years of work had been wasted. Stories of such tragedies could be multiplied.

In the light of such experiences it is incumbent on a number of states to pass legislation that will protect educational degrees. At present 17 states are without effective laws on this subject. So long as even one state permits counterfeit degrees to be granted, so long will it be possible for this deception to continue, although the Post Office Department has from time to time been successful in closing spurious institutions by proving that they have made fraudulent use of the mails.

This action however does not attack the roots of the disease—lax incorporation laws. Until complete legal control and supervision of degree granting institutions are obtained in every state in the country the reputation of higher education will continue to be injured.

—*Education Digest*

## REVIEWS

*'Five Hundred Short Stories' for the use of teachers.* Selected by Frederick J. Gould, George G. Harrop & Co. Ltd. Price 3s. 6d.

This is an excellent collection of stories for the use of teachers. They have been gleaned from various periods of time and many countries. They are simple, and compressed, but they are all capable of expansion. They illustrate ethical qualities like courage, humanity, self-control, truthfulness, sincerity, citizenship. If told in a lively manner, these stories are bound to have a deep impression on the minds of young men. Such stories play an important part in character formation and teachers can use them to good purpose. The publishers deserve congratulations for bringing out such an excellent collection of stories illustrating so many beautiful social and moral qualities.

—J. D. S.

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*Eight Hundred Thousand Children—Facts about the Cincinnati Public Schools.* Published by the Federated Council of Cincinnati Teachers Organisations.

This is a very interesting booklet giving a good deal of useful information about the Cincinnati Public Schools. It gives a brief statement of the activities and a general outline of the progress of the Cincinnati Public Schools. During the last 108 years, about 800,000 children have been pupils of these Public Schools, and the Cincinnati Schools may well be proud of them. The recorded enrolment totals about 4,000,000. One can know from this booklet how the schools were originally started, facts about the Elementary schools, Music, Industrial Arts, Junior High Schools, Excursions organised by the schools, Penmanship, Physical Education, Summer Academic Schools, Senior High Schools, Vocational High Schools, Vocation Bureau of these schools, Night Schools, Bureau of Research and schools for Exceptional Children. There are few public schools that have organized so many useful activities. The Cincinnati Public Schools have had a proved record of achievement to their credit. They have grown from strength to strength and there is hardly a branch of educational activity which they have not explored,



organised and perfected. The booklet is profusely illustrated. It is a most useful publication.

—J D S

*Inter University Board, India, Annual Report, 1936-37*

The Inter University Board has been doing a good deal of useful work. The Report under review shows that the Board suggested that the Intermediate Examination in Science should be adopted as the qualifying test for admission to courses of study for medical degrees and the suggestion was accepted practically by all the Universities, having Medical Faculties, it pressed for uniformity in the period of Honours Course in the various Indian Universities, it drew the attention of the Government of India to the desirability of including a number of additional subjects in the curricula of the different examinations held by the Public Service Commission, it has compiled a list of special subjects in which facilities for research exist in the various universities, it has recommended Inter University Extra Mural lectures, it invited the different Universities to consider the question of instituting a Degree or Diploma in Pharmaceutical Chemistry and of including Nautical and Aero Nautical instruction in the University curriculum. These are only a few of the activities of the Board. For details, one must read the whole report. The Board is performing a very important function in co-ordinating the work of the various universities and has brought both the Government and the people in touch with their activities, their needs, and achievements. The Report shows that the Board has been remarkably active and the credit for its various achievements must go to Pandit Amaranatha Jha, its able and enthusiastic Chairman and Prof N K Sidhanta, its indefatigable Secretary. All those who are interested in University Education must go through it carefully.

—J D S

*The Problems of Education—A First Course for the Orientation of Prospective Teachers* By Claude C Crawford, Louis P Thorpe, Fay Adams. Published by C C Crawford through the facilities of Southern California School Book Depository, 3636 Beverly Boulevard, Los Angeles, California.

This is an admirable attempt to plan out an Introduction to Education on a strictly pragmatic basis. Most books written

for pupil teachers contain only abstract lectures. The book under review breaks entirely a new ground. The purpose of this book is to make students conscious of vital educational issues, and to suggest certain activities which will lead them on to the solution of these problems. Rightly has Dr. Thorpe said, "Problems initiate intellectual stress because they demand resolution. The resolution process leads naturally and actively to a search for relevant information and for concrete experience. Thus if the problems be representative of the reacting agents' perceived needs, we have secured the much sought after motivation. The plan of this volume is based on such a psychological principle. It begins with problems and leads the student to discover answers. The value of such a procedure should be obvious."

Emphasis has been laid throughout the book on *doing* rather than on merely *knowing*. Each topic begins with a statement of a particular problem; then the various issues connected with the problem have been mentioned; finally a number of activities which are likely to give a clue to the solution of the problems have been suggested. At the foot of every page, the education index and educational abstracts have been given, and also periodicals, "reserve shelf" and a number of books bearing on the topic have been suggested. Altogether 207 topics have been given in the form of problems.

This is a pioneer work and one of the most stimulating books we have come across. The learned authors deserve the congratulations of all teachers on their venture. We hope the book will have a wide circulation in India.

—J. D. S.

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*How To Teach.* By Claude C. Crawford, Ph.D., Professor of Education, University of Southern California. Published by C. C. Crawford through the facilities of Southern California School Book Depository, 3636, Beverly Boulevard, Los Angeles, California.

This is an excellent text-book for upper grade and secondary school teachers. In the beginning of each chapter, a number of class-room activities have been suggested. This is followed by a brilliant and lucid discussion of the various topics. The following will serve as an illustration:—"One of the best ways to teach a bright pupil is to get out of his way. It takes a bright teacher to keep far enough ahead of a bright child that the child won't stumble over him in his progress. Every now and then,

a fat referee at a football game wins the game for the wrong side by getting in the way of a player as he goes down the field. Likewise, bright pupils often do poor work, because they are bored with the monotony of the program that is laid out by a plodding teacher. A task has to have a little intellectual quality, a little reward in it, a little imagination, else the child simply does not take hold of it. If a child has a chance to use his initiative and resourcefulness, or if he has something to think about, he can keep interested. The classroom is another place where nature abhors vacuum. Bright children do not need to practise all fifty nine problems in a drill exercise in order to get the principle. If they are asked to do it, they may refuse, or do it under protest.

There are 27 chapters in the book. The chapters on Planning Lessons, Problem Teaching, Appreciation Teaching, Using the Library, and Project Teaching are exceedingly interesting. The author's outlook is critical, healthy and practical throughout. At the end of each chapter, there are selected references which are very useful. Every school library ought to possess a copy of this book, and students in Training Colleges will do well to go through it carefully.

—J D S

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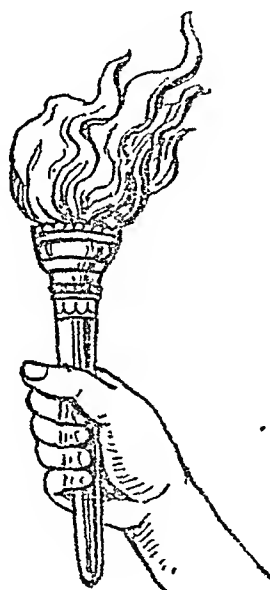
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VOL. III

No. 12

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR:  
D. P. KHATTRY



DECEMBER, 1938

ALL-INDIA FEDERATION OF  
EDUCATIONAL ASSOCIATIONS

- POST-BOX 52, CAWNPORE

PRICE ANNAS EIGHT

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### Editors' Note

The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments, (d) articles containing statistics and their application to the solution of educational problems, (e) short notices of original works, (f) news or interest to educational workers

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# Indian Journal of Education

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## THE UNIVERSITY AND THE VILLAGE

BY

REV. C. F. ANDREWS.

(*Extracts from the Convocation Address of The  
University of Mysore.*)

We live in a distracted world which is passing through a hurricane of evil. The cyclone has swept from one end of the earth to the other. In the Far East, Japan has invaded China, and an incredibly cruel war has been carried on with ruthless ferocity for over a year. In the west of Europe, Spain has been torn asunder by a struggle that is no less deadly. Day after day we look at the news in the papers concerning Central Europe in order to see whether war has broken out or not. It will not do for us in India to say with Hamlet,

The world is out of joint. O cursed spite!  
That ever I was born to set it right!

For we *must* seek the deeper causes of the evil within ourselves. Otherwise we, too, in our turn, may be brought within the hurricane zone.

\* \* \* \* \*

The subject I have chosen—how to bridge over the gulf between the rich and the poor; between the University and the villages,—is by far the most difficult that we can approach. Only that State, which can set to work sincerely to solve this problem, is likely to weather the storm. We have lately witnessed, in Europe, how ancient dynasties, that did nothing to help the poor, have crashed. Here in India we have begun to realize how near the danger may be to ourselves, and how short is the time for putting our own house in order. If I keep strictly, as I am bound to do, to the academic aspect of my subject, the importance

of the political issue will not be forgotten. Pure science is the basis of all applied science. So what I try to put forward in principle lies at the back of that ferment in Indian politics which is leavening our national life.

First of all, let us frankly acknowledge, that in spite of much that has been harmful, great benefits have come to India through its long association with the West. The hard, stern, exact, scientific thinking of modern Europe has brought this country, with a shock, out of its ancient fairyland of dreams. To take a concrete example, which every historian would accept, the impenetrable wall of untouchability was breached at last in the nineteenth century by the terrific impact of Western scientific and democratic thought. The wrong to womanhood, caused by child marriage, has also been brought home to the conscience of India in a similar manner. The present successful movement for social reform goes back to the liberal ideas of Gladstone and Bright, of Mazzini and Abraham Lincoln, as well as to the insight of the great Indian reform leaders, beginning with Raja Ram Mohan Roy and ending with Mahatma Gandhi.

The West has reaped its own benefits in return. Perhaps the greatest has been the recovery of the immensely potent conception of one Spirit pervading Man and Nature. We can trace the effect of this quite early. The vast intellect of Goethe first hailed it from afar. Wordsworth, in his own ruggedly independent way, worked out its inner meaning. Shelley felt it also in his eager spirit. The more directly *Indian* contact is seen in Emerson and Walt Whitman. The full effect was shown in 1912, by the remarkable reception given to Rabindranath Tagore's 'Gitanjali'. This small book was translated into all the languages of the West, and had, perhaps, its greatest influence in America.

It is true that the World War swept this aside for the time being, and a crude, intransigent theology has succeeded, especially in Central Europe. But already the pendulum has swung back, and astronomers like Eddington and Jeans are revealing to us a renewed desire to approach this avenue of the Spirit along which our mysterious universe may be explored.

A further influence, which we all recognise in our own day, has been that of Mahatma Gandhi, who has shown us in the West, in part at least, a way out of our modern chaos by putting into practice the vital principle of pure non violence in face of a world filled with violence and untruth. This very year, I was invited to go over to Europe, and also to America, for the sole purpose of setting before the most earnest thinkers in both continents the great principles in action for which Mahatma Gandhi stands.

So far then we may assert, historically, that benefits have accrued on both sides from this closer contact between East and West.

But in India, owing to political domination, there have also been injurious features which need to be eliminated. Let me explain by typical examples some of these evils.

When I was teaching in the Punjab University more than thirty years ago, by far the greater proportion of those whom I taught came originally from the villages. They were the best brains in that generation. But I can hardly remember a single instance of one who went back to his own village in order to work for his village people. His English education had cut him off from his own kith and kin. Thus the fact became glaringly evident to me long ago, that the villages were being depleted of their best intellects in order to feed the elaborate machine by which the administration was being kept going.

A further fact struck me at once with dismay. I could not get a single student, who was living with me in our hostel, to speak to me in any other language but English. This was not due to any want of effort on my part. For I used to try very hard to speak to them in my own broken Urdu and Hindi, because I longed to be able to converse fluently in these two Indian languages; but the invariable result was that they answered me back in English, because their one desire was to learn English as rapidly as possible.

One more story may be mentioned. Once upon a time, in South India, I was asked to speak at an Old Students' gathering. The first thing that I noticed was the imitation of European methods in almost everything that was done. With a view to counteract this, I quite innocently suggested to the President that he should make his closing remarks in Tamil, which was his own mother-tongue. But when he got up on his feet and tried to do so, he completely broke down and had to finish his speech in English. He acknowledged to me afterwards, with noble shame, that there was something strangely wrong with his education, when he could not speak even his own mother-tongue correctly.

Thus two very disturbing features came early to my notice. One was the manner in which the best intellectual life was being drained out of the villages into the towns. The second was that English had become nothing less than a craze and an obsession.

It must be remembered that these things about which I am speaking occurred many years ago. Mahatma Gandhi had not come back from South Africa, and the National Movement had not swept over the whole country, like a purifying flood, clearing

away the debris. Yet, in spite of all that has happened since, the divorce between the University and the village has by no means been set right. The English educated still shun the village life and tend to become congested in the towns. Unemployment among them is increasing.

If I am asked impatiently whether the English language should be abandoned altogether, I should at once answer, 'No.' For, as I have shown, it has had its own valuable uses. It has been the solvent, through its literature, of some of India's worst evils. It has also welded together, as nothing else could have done at the time, the diverse parts of India. Still further, it has brought India into touch with the vast outer world of thought where English is commonly spoken.

But now, this earlier phase is nearly over. English will still be taught, but it must no longer be the *medium of instruction*. That should, in future, always be the mother tongue. Indian teachers must use the mother tongue when they teach geography, history and mathematics, they must no longer employ the medium of English. I have used the imperative word 'must,' because I have no doubt whatever that this step has at once to be taken.

Very soon, we may hope that the State will follow the example of the University and use the mother tongue both in the Law Courts and in Government offices. Then we shall witness some of the best results of this important change, whereby a true independence will be reached by Indian manhood and womanhood, and one of the greatest barriers between the village and the University will be demolished.

\* \* \* \* \*

I would ask one very simple and obvious question. Is there any other country in the world except India where instruction is given from the school stage right up to the University through the medium of a foreign language? Personally, I cannot recall a single instance, nor can I remember any area, where the gulf has become so wide between the educated classes and the village people.

But the harm done by this foreign medium has gone far beyond the sphere of language and education. It has invaded other sides of life as well. Perhaps the most injurious has been the continual rise in the cost of living, without any compensating benefit to the common people. Artificial needs have been created by the rush of foreign articles into the market and these have ousted the homely things made by our own people. In this

manner the old industries of the villages, one by one, have been destroyed.

It has become a commonplace to note how this has happened with regard to Lancashire cloth. Mahatma Gandhi had drilled into us the bad effect of such foreign expenditure. But the damage done has by no means stopped at articles of clothing. It has gone on to cover almost everything we use down to the smallest details of every-day life.

I remember, long ago, the first occasion when I went down the Chandni Chowk at Delhi, in order to get some India-made things to send home as a gift to my sisters. To my horror, I found that every shop was full of cheap and tawdry foreign manufactured goods, which had been sent out by ship to India. Mr. Rudra, who was with me, had to take me down some side street before he could find a shop where I could obtain genuine handmade Indian goods. The injury done by such a one-sided process of trade has to be carefully noted. Those things which are exported to England, in exchange for these foreign manufactured articles, are taken out of the Indian soil in one way or another. That is to say, the raw products of India have been diminished in order to receive in exchange these goods from abroad. We have been diminishing instead of increasing our food values.

This process of deterioration has to be gradually reversed. The nutrition which comes from Indian agriculture and husbandry must be conserved. Whatever articles of dress or furniture are needed must as far as possible be produced in India itself. Only in this way can the life-blood of the Indian villages flow freely again and some prosperity return to those who are now living almost below the level of subsistence.

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We come now to the last evil that needs to be entirely swept away. Hitherto, as we have seen, an inferior imitation of the West has been the uninspiring aim set before us. This has left behind it what Mahatma Gandhi has rightly called a 'slave mentality.' With mighty blows, he has broken the chain which bound us fast with this strange mental subjection. The general effect of his appeal throughout the country has already been amazing: and yet in the Universities themselves a cautious conservatism still holds sway which is desperately hard to break. Here, in the Universities, has been the stronghold of this Western obsession: and therefore I welcome an opportunity of striking another blow for freedom.

I know that, in doing so I have with me the hearts of all who are young and of many also who are old. But I would repeat again and again, we are not living today in a normal world. The time is short. We have already passed through one world war, in a single generation, and are on the brink of another. Therefore, in these matters, we must aim at a radical change of heart, which must be nothing less than drastic, for we have to keep pace with the crisis in the midst of which we are living. We cannot go on in an easy, slipshod manner, while the whole world around us is aflame. The revolution has come to our own doors. We have to appeal to the power of sacrifice in the heart of youth to make a supreme effort, and if we do this, we must be ready for sacrifices ourselves. The older generation must not throw the whole burden on the young.

A short time ago, I was talking over this whole subject with Swami Abinashananda, one of the oldest members of the Ramakrishna Mission. He said to me, "I was born in a village and spent all my boyhood there. My English education, in Madras, cut me off from my own village people. Only now in these later years, as a Swami, have I been welcomed back again with open arms." "How well," he continued, "I remember that village life! How dear it was to me! There was something precious in it, that we have almost lost to day!"

I asked him to tell me what this was, and he replied, "We truly loved one another and shared everything in common. But now we have lost this joy of fellowship. Another more selfish spirit has entered. We, who are educated, have acquired new tastes and new habits, which have separated us from our own people. We hear a great deal about rural reconstruction nowadays, and this has its importance, but it is the old spirit of village brotherhood that needs most of all to be revived. *We have to come back, both to our faith in God, and to our trust in one another.*"

His words, which were spoken with the deep sincerity of a man of religion, reminded me of my own early days at Cambridge nearly fifty years ago, when I too at one time began to feel acutely the change from my home surroundings owing to the new intellectual environment of the University. One thing saved me at that time from moral disaster. It was the touch I had with poor people. In the slums of South East London, among the very poorest, there was a College Settlement, where I could go down for a week end, or during the vacation, and live among those who were facing problems of suffering and poverty that were far harder to solve than mathematics. These poor people

had kept their simple faith in God and they helped me to keep mine. Through my love for them, in the midst of all their hardships, so bravely borne, I was able to love God also. So, when my University days were over, this College Settlement, in the midst of the poor of South East London, became my home; and the most fruitful days in all my life were spent there learning to understand the needs and sufferings of the poor. I should never have understood India's poverty, if I had not lived thus as a poor man among the poor in my own country.

My thoughts, therefore, have naturally been directed to this experience of poverty in my early days. For this drew me as with a magnet to the side of Mahatma Gandhi in South Africa, because it was clear to me in a moment that he had sacrificed everything for the cause of the poor. The same thoughts drew me also to Gurudeva, Rabindranath Tagore, who has for more than fifty years devoted himself with a heart full of love to the poverty-stricken villagers in his own province of Bengal.

I have gone on to wonder, since coming to Mysore State, whether there might not be formed an Asram or Settlement not unlike what I have lived in at Santiniketan and also at Sabarmati and Wardha,—similar also to Kingsley Hall in the east end of London, where Mahatma Gandhi lived when he went over for the Round Table Conference. For even then he would not lose touch with the poorest of the poor, and he found a home at Kingsley Hall, under the care of Muriel Lester, which was nearest to his heart's desire.

It has been brought to my notice that students go out from this University to the villages; and I have seen the nucleus of a work, such as I contemplate, already started at Bangalore. But I am now asking for a much more extensive effort to be made. Might not there be an Asram or Settlement, directly connected with the University, with buildings of its own, where University graduates might go who were determined to become one with the poor by sharing their hardships?

A Town University Settlement of this kind would obviously be best established in the centre of the mill area of Bangalore. It should not only undertake what might be called 'hospital work' by cleaning up the slum quarters, but should also be the home of earnest thinkers and workers who would throw in their lot with the poor and be able to speak impartially for them in those big issues relating to the hours of work, the rate of wages, accident and sick insurance, maternity benefits, etc., which make all the difference in the lives of thousands of poor people. For while Mysore State can rightly be praised for its advanced labour

from time to time to live there along with others who were settled in as permanent residents.

The expense incurred in food and establishment should be such as would satisfy the exacting requirements of Mahatma Gandhi himself, if he were able to visit the Settlement. I have gone into detail in order to make the picture glow before you; for I have had in my own mind all the while the joy of such poverty among the poor which came into my own life, when, for some years, after my college days were over, I was given the charge of such a Settlement as I have described in one of the slums of London. As I have stated, the whole of my later life which I have spent here in India among the poor received its first impulse in those years when I lived in the same manner in London. They were not only the best, but also the most formative years that I have ever spent; for they shaped the whole of my life in this one direction.

With regard to the second University Settlement among the villages of Mysore, it should include a dispensary and small hospital attached to it and also be made into a handicraft training centre for village boys who might afterwards go back to their own villages to practise what they had learnt.

Further, young villagers should be taught, through classes at the Centre, how to improve the health conditions around them. A kindly and wholesome rivalry might be set up between the different villages which are near the University Settlement as to cleanliness, neatness, and beauty. Thus the Settlement itself would be a focus in the midst of the country for all kinds of training which might help the villagers to take a thoroughly genuine pride in their own surroundings.

Through those who come for different purposes to the Centre, a close touch might be established between the villagers and the University Settlement, so that there would be no difficulty for research workers, who come into residence, to pay personal visits to the villages where they would be welcome. As in the town Asram, the standard of living among the residents would have to be so simple that no villager, who came to the Settlement, would feel out of place. Here again, the standard set by Mahatma Gandhi might be followed.

By means of village fairs, or jattras, it should be possible to give some brightness and joy as well as training and instruction. Such village festivals have their great use in breaking through the monotony of ordinary existence. They add happiness to village life and thus make people ready to stay in the country and not flock to the towns.



The ultimate goal is every day becoming clearer to those who are planning the future. That goal is to find some inexpensive means of harnessing the water power of Mysore State for the use of the villages and also of the poorer parts of the towns. If this can be done, it will help to bring all kinds of minor industries back into the country life as a whole, instead of concentrating them in the big cities. It will also make the cleaning up of the slums much more easily accomplished. The one hallmark of success will lie in decentralization. It may not be too late to undertake in this manner State Socialism of the best type, to spread industry, rather than to concentrate it in one or two places. But, for this purpose, ardent enthusiasts will be needed, who love Mysore with all their hearts, and are ready to work night and day to make Mysore a model State, where the best ideals of India may be carried out on a princely scale with the cordial goodwill of the people behind them.

Hitherto, I have only spoken of outward prosperity, but there are other things that need to be brought into the villages which are even more important. "Man shall not live by bread alone." The old *mantram* of the Upanishads, 'From joy all things proceed, in joy all things consist, unto joy all things return,' is as profound as it is true. What Swamiji told me the other day contains the secret of the best happiness and contentment. "How we used to love one another." That was the inner joy which made men long to return to their own village after their education was over and made them even homesick for it.

"Our object should be," writes Tagore, "to try to flood the choked bed of village life with the stream of happiness. For this, the scholars, the poets, the musicians, the artists, have to collaborate, to offer their contributions. It is fulness of life that makes one happy, not fulness of purse."

What Tagore means is that the villager needs inward happiness, peace, and contentment, as well as abundance of food, and it should be one of the chief functions of University Settlements of this kind to bring joy to the poor.

Joy and Hope! The depression in our villages must cease. Hope must enter, so that Joy may abound. Only by the rich and poor, the University and the villages, coming closer into touch with one another, can this be accomplished, and Mysore remain a happy and prosperous State.

# EDUCATION AND DEMOCRACY

BY

FRANKLIN D. ROOSEVELT,

*President, U.S.A.*

No nation can meet this changing world unless its people, individually and collectively, grow in ability to understand and handle the new knowledge as applied to increasingly intricate human relationships. That is why the teachers of a country are the ultimate guardians of the human capital of that country, the assets which must be made to pay social dividends if democracy is to survive.

We have believed wholeheartedly in investing the money of all the people on the education of the people. That conviction, backed up by taxes and dollars, is no accident, for it is the logical application of our faith in democracy.

Man's present-day control of the affairs of nature is the direct result of investment in education. And the democratization of education has made it possible for outstanding ability, which would otherwise be completely lost, to make its outstanding contribution to the common weal. We cannot afford to overlook any source of human raw material. Genius flowers in most unexpected places; "it is the impetus of the undistinguished host that hurls forth a Diomed or a Hector."

No government can create the human touch and self-sacrifice which the individual teacher gives to the process of education. But what government can do is to provide financial support and to protect from interference the freedom to learn.

No one wants the federal government to subsidize education any more than is absolutely necessary. It has been and will be the traditional policy of the United States to leave the actual management of schools and their curricula to state and local control.

But we know that in many places local government unfortunately cannot adequately finance either the freedom or the facilities to learn. And there the federal government can properly supplement local resources.

Here is where the whole problem of education lies indefinitely with natural resources and the economic picture of the individual community or state. We all know that the best

with enthusiasm by senior students, especially by those whose earlier religious instruction has taught them to think for themselves and to enter with sympathetic understanding into the thoughts and ways of those professing other religions than their own. *But what matters first of all is not theology but religion—religion as we find it exemplified in the lives and experience of the great saints of every age and race.* Jesus, quoting from the Old Testament, summarised the whole thing in the famous two-fold commandment, "Thou shalt love the Lord thy God with all thy heart and mind and soul and strength" and "Thou shalt love thy neighbour as thyself." It would be difficult to find a better summary. For true religion is essentially two-fold, mysticism and brotherhood, an experience of God on the one hand and a way of life on the other, an experience which harmonises the whole personality and generates power and peace, and the outcome of that experience in a life of selfless service dominated by the sense of brotherhood, of the unity of all life. That "He who knows himself one with God knows himself also to be one with every other," is an axiom of Vedantism. And to "know" in that sense means more than a rational conviction. It includes the intuitive knowledge which transcends reason and which is the core of religion.

This, then, is what we seek to convey to younger pupils, not theology but religion. First and foremost a sense of the grace and majesty, the poise and power of some of the world's greatest saints, especially those who were founders of the living religions or writers of the sacred books of the world, and coupled with this a recognition of these great souls as our own elder brothers to be loved, revered and, so far as may be, imitated. Second, some understanding of the message and way of life of these Elder Brothers (or Great Companions, as Walt Whitman called them)—the message of brotherhood and love, of overcoming evil with good, of selflessness and simplicity, sincerity and single-mindedness, of doing unto others as we would that they should do unto us, above all, the message that since religion is a function of the whole man, the peace that passeth understanding can be attained only by complete surrender to the will of God, and whether that is interpreted to mean (as in Islam) surrender to a power outside oneself, or (as in Hinduism and Buddhism) the progressive realisation of one's own spiritual self, does not seem to me to make much practical difference. The explanations may vary, but the experience and way of life are essentially the same. Thirdly we try to give the children some conception of the historical continuity of the different religious systems and the

influence they have had upon one another. We begin with Zoroaster, who is probably the first prophet known to history who fought his own way to an understanding of the relation between morality and religion, and taught that God is Righteousness and not just a somewhat temperamental Nature deity. Thence we pass to Moses and the Hebrew prophets who stressed the same point, insisting that the formalities of religion were of no use without purity of heart and life in the individual, and social righteousness and justice in the community. Thence to Christianity and Islam, both of which grew out of Judaism and were profoundly influenced by Zoroastrianism. Then in another group we take the more easternly religions and shew how Buddhism grew out of Hinduism. And in China how both Confucianism and Taoism grew out of the older nameless religion of the country and were later modified by Buddhism. In this way we try to give the girls a world view of the history of religion as well as a grasp of the essential underlying unity of all great religious teaching and example.

One point which emerges from this historical survey is the important and interesting one that the so-called founders of the great religious systems did not set out to found new religions at all, but to call the people of their day and generation back from priestcraft and superstition and hypocrisy to a truer understanding of, and a fuller loyalty to, what was best in their own religious traditions. New religions sprang up in their name because their followers preferred to bow down and worship them, or to accept slavishly the letter of their message, instead of catching their spirit, obeying their precepts and walking in their way. Mr. Shastri in a recent address, speaking of Mahatma Gandhi, adjured the people of this country to be "not his worshippers but his co-worshippers of the goddess of Truth." It is a timely warning and one that I believe would be shared by all great religious teachers, ancient and modern—not to call them "Lord Lord," but *with* them to worship God and do His will, who, whatever else He may be, is surely revealed in all Beauty, Truth and Goodness, the great, universal spiritual realities.

When the subject is faced in this spirit the choice of material becomes far less embarrassing than would at first sight appear. It is the *universal* in every religion which is selected, those passages of scripture containing truths which can be paralleled in other scriptures which are learnt. *If people continue to want their children to be taught the particular doctrines of their own faith (as doubtless many will) let them have it by all means, but let such instruction be carried on at home or within the different*

*sectarian institutions, at school let them learn, all together, those things which the different religions have in common, the elements of Universal Religion*

It is too early yet, after only four years, to make any claims as to the results of such teaching. We can only hope that it may do something to counteract the blatant evils of narrow mindedness, fanaticism and communal rivalry, and unite people on the basis of their common brotherhood, as children of one God and members of one family, as well as teaching them to think for themselves.

Not very long ago a Muslim girl who has been in the school since the beginning of the experiment, went to her teacher and told her that, as a result of the classes, she had got entirely new ideas of Hinduism and of Hindus whom previously she had disliked. And one of my own senior girls, a Hindu, sought me out to tell me that the classes had taught her to have a new regard for the Muslim girls. Another girl, asked what she most admired in Buddha, said it was his spirit of renunciation, thus using her own judgment to select the most important feature of the story that had been told. And a still more interesting illustration of the same thing was a girl who, after I had read to the class the great psalm of Love contained in the thirteenth chapter of first Corinthians, meditated for a moment and then said, "That writer says that hope is good, but Buddha said that desire was bad. What is the difference between hope and desire?" These are spontaneous testimonies, not perhaps of any great significance in themselves, but a straw is enough to shew which way a stream is flowing.

It would, of course, be futile to pretend that there are no difficulties in the path of this sort of religious instruction. There are, and formidable ones too. But not more formidable than those which beset, for example, the path of Science in the days of Galileo. Now, as then, the timid will fear the new ideas as dangerous innovations, the slavish and unimaginative will deplore such broadening of the connotation of the word religion, jealous sectarians will protest, in dread for the security of their narrow strongholds. But Truth will go marching on.

But the greatest of all difficulties, certainly at the initial stage and perhaps always, is to secure teachers to teach the subject in the right spirit. A formidable difficulty indeed, but surely not insuperable, especially in India where the majority are brought up in the traditions of the most tolerant and truly universalist of all the great religious systems of the world. Knowledge certainly they must have. The study of Comparative

Religion will supply that. But more important even than knowledge is religious experience. Teachers of religion must be themselves men and women of religion if they are to impart to their pupils anything more than an intellectual understanding of the subject. For in the last resort religion can be caught but not taught. Or rather, the impulse towards the quest can be caught from another, but religion itself must be sought and found by each individual for himself. As the Greek philosopher Plotinus said long ago, writing and speaking of religion "is as when one showeth a pilgrim on his way to some shrine that he would visit, for the teaching is only of whither and how to go, the vision itself is the work of him who hath willed to see." Teachers who remember that will not go far wrong. They will give their pupils knowledge of as much as they can of the great chapters in the spiritual history of humanity. But they will never forget that their chief function is to awaken in children reverence and love for Beauty, Truth and Goodness, and so to set their feet on the path which will lead them to the mountain top whence they may see the vision for themselves.

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### TEA TO THE RESCUE

An interesting incident relating to the soothing effect of tea on jaded nerves has been recently related by Mr. Sultan Hosain Khan, Headmaster, Municipal Primary School, Khairabad, in the Sitapur District in the U.P. A boy named Mohammed Hosain, it is stated, had studied so hard before the examination that when the hour came, he was in a state of extreme nervous tension. He was unable even to make a start on his examination paper and eventually collapsed into a dead faint in the examination room. The headmaster, who was aware of the beneficial effect of tea in such circumstances, immediately ordered a cup of tea to be prepared, which was given to the boy as soon as he recovered consciousness. The stimulating effect of tea so revived the boy that he was able, the headmaster says, to complete his examination paper in a satisfactory manner.

—*Tea News and Views, October, 1938.*

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man

*is the history of  
his journey"*

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## EDUCATION AND POLITICS

BY

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[*An Address delivered to the Aberdeen Educational Institute.*]

Broadly speaking, there are three main views as to the proper relations between education and politics. First there is what we may call the "totalitarian" view. It underlies the educational systems of the modern dictator states, and is also, by implication at least, the view of Plato. Its fundamental principle is the frank subordination to political ends of all the other functions which education may fulfil. Not merely is the task of training up good citizens held to be more important than those of imparting knowledge, developing cultural interests, and stimulating critical powers; by "good citizens" is meant citizens who will accept and fit in with the particular social and political systems of the State concerned. German children are to be made into good little Nazis, Italian children into good little Fascists, Russian children into good little Communists, and so on. And if in the process their opportunities of becoming educated human beings are restricted, then that cannot be helped; for the State is more important than the individual.

In fact, of course, these opportunities *have* been restricted: political education has to a greater or less extent interfered with general education. If one may generalise from the position in Germany there seem to be four main ways in which the non-political ends of education tend to suffer as a result of the strict application of the totalitarian principle.

(1) The time (and energy) available for acquiring culture and knowledge is reduced by continual interruptions in the form of drills, labour and military service, listening to speeches by political leaders and other forms of propaganda.

(2) The actual knowledge imparted is given a nationalist-political bias by means of the selection and even the deliberate distortion and falsification of facts.<sup>1</sup>

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<sup>1</sup> For a frank statement of Nazi principles as applied to the teaching of history see the extracts from Rödiger, *History, its Purpose, Material, and Method*, in the "Friends of Europe" publications, pamphlet No. 57.



(3) No attempt is made to conceal the general principle that a precise knowledge of facts and of causes and effects is of less importance than the possession of a correct attitude with regard to political ideology. That is to say, the pupil comes to have a contempt for scientific standards, truth ceases to be an end in itself.

(4) No effort is made to develop the powers of independent thought and criticism, on the contrary the younger generation is indoctrinated with the conviction—welcome, perhaps, to many of them—that thinking is unnecessary and suspect. The whole community is to be spiritually an army in which only the leaders are to “reason why.”

Now it may be that education along these lines represents the best method of training up the citizens of a totalitarian regime. But clearly it will not do for a democracy, both because the good citizen of a democratic state must have precisely those gifts of criticism and objectivity which are so undesirable under a dictatorship and because it is not consistent with the spirit of modern democracy to sacrifice the education of the man to the education of the citizen. A schooling system which is avowedly biassed in favour of a particular set of political views, whether it be good or bad in other respects, is at least undemocratic. Let us observe, too, that it would be undemocratic even if it were professedly used in support of democratic institutions themselves. There has of late been a tendency in some quarters to argue that if we are to build up and maintain the democratic system in Great Britain we must adopt the same sort of methods which are used abroad in support of totalitarianism. We are urged frankly to bias our pupils in favour of democratic policies, to instil in them the conviction that fascism (or communism) must lead to injustice, poverty, war and the rest—we are, in fact, to use our educational equipment as a buttress of the political system in which we believe, and which we wish to maintain and perpetuate. I shall have more to say about this type of policy later on. At first sight it is suspiciously like doing evil that good may come of it. What is proposed is that we should be undemocratic in our educational system for the sake of democracy in our political lives. And we may be tempted to reply that if our belief in democracy is more than skin deep we shall refuse to restrict it to the political field, we shall hold that the true citizen of a democratic society must have learned to be objective and unbiassed even about political democracy itself.

This brings me to the second main view as to the relation between education and politics—what I may call the “leave them

alone" view.<sup>2</sup> The objection to all attempts to bias the child in favour of a particular set of political principles is that they obstruct his freedom to choose for himself. He has been brought up (let us say) to a belief in imperialism, has perhaps been encouraged to join an imperialist league or to identify himself with the political party whose programme is most sympathetic to imperialist ideas. What happens, then, when he reaches mature years and is called upon to play his part as citizen of a democratic community? There seem to be three possibilities, all of them undesirable. He may retain without serious questioning the imperialist views with which he has been indoctrinated; in which case they are not really *his* views at all, being the expression of habit and emotion rather than of reasoned conviction. Or he may come to question these views on rational grounds and wish to change sides, in which case his convictions are at war with his loyalties—his head with his heart—and the process of changing sides will involve unnecessary psychological strain and even the danger of issuing in an irrational bias *against* imperialism and all its works. Or finally if losing faith in imperialism he is yet not sufficiently convinced that it is a bad policy to wish to change his political allegiance, he will probably relapse into a disheartened apathy and will cease to trouble his head about political issues. This trilemma could be avoided if we were sure that as he grew up his reason, when brought into play, would strengthen and support, instead of conflicting with, the emotional bias instilled into him during his school years. But in fact we cannot be sure of this, either with regard to imperialism or to any other political issue. The only solution, then, is to avoid indoctrinating him with political views. Children cannot be expected to have *reasoned* ideas about political matters; let them therefore be left alone, so that when they reach maturity they can make up their minds for themselves, unhindered by emotional loyalties to one side or the other.

The second view, then, as to the place of politics in education amounts to saying that politics should have no place in education. It is a view which will perhaps command wider sympathy in democratic countries than the "totalitarian" view described above; for it is not merely more democratic in spirit, but it also would leave our schools free to pursue the ends of knowledge and culture without being distracted by political bias

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<sup>2</sup> See, for example, W. B. Curry, "Let's leave the children alone," in the *News-Chronicle* for February 18, 1938.

or propaganda. Unfortunately there are three serious and indeed fatal objections to it.

In the first place it is impossible of attainment. Let us assume—what is no doubt largely the case in Great Britain—that no teacher deliberately and consciously uses his position to prejudice the free development of his pupils' political ideas. And let us assume that wherever it is possible for a subject to be politically neutral it is in fact so taught, that the divinity lessons do not hint that either national patriotism or international good will are Christian virtues, that English literature is taught in such a way as neither to glorify nor to belittle the achievements of Great Britain as a nation (poems like Macaulay's *Armada* being ruthlessly excised from the roster of works to be learned by heart), and that when studying geography the pupil's attention is never drawn to the fact that over a quarter of the land surface of the world is coloured red in his maps. There remains one subject which cannot be freed from political implications—the subject of history. The teacher of history must have political views of his own; and however much he may try to prevent it, these views are bound to leave their mark upon his teaching. So also with the text books used. How can a book on British history fail to express a general standpoint as to the relations between Great Britain and other countries, or as to the merits and demerits of nineteenth century *laissez faire*? We have only to compare the accounts given of the same past events in the standard text books of different countries to see that even when there is no evidence of conscious bias on the part of the writers, their own upbringing and environment decisively affects the interpretation they place on the events in question.<sup>3</sup> History has been described as “riding some strong idea through a morass of facts which would bog you down and drown you if you were not mounted.”<sup>4</sup> And if the historian is unaware of what his “strong idea” is—if he does not realise that what he finds interesting and worthy of inclusion in his book is largely determined by his own bias with regard to political problems—then he is more rather than less likely to impress his readers with the same subconsciously accepted point of view. We may, in short, be able to reduce the amount of politics we admit into our classrooms: we can never eliminate it completely.

<sup>3</sup> Cf. for illustrations Scott, *The Menace of Nationalism in Education*, London 1926

<sup>4</sup> Eastman, *The Enjoyment of Laughter*, p. 187

Secondly, the attempt to be completely impartial and objective on political questions itself represents a "view" on politics—a view which the teacher will to a greater or less extent pass on to his class. Either he will so far as he can *avoid discussing* political matters; or else if he does discuss them he must refuse to commit himself to any definite verdict. If he adopts the former alternative his pupils will grow up under the impression that politics does not greatly matter, and they are likely on reaching maturity to be apathetic and uninterested; while the effect of the latter course will be to make them think of politics as an academic sort of subject on which no definite views are desirable or possible. In either case the effect (so far as it goes) will be to discourage those so taught from taking the active and critical interest in political decisions which is required of citizens of a democratic country.

Finally let us observe that the whole case in favour of the "leave them alone" view is that it is the only view compatible with democracy. It might, then, be a reasonable view if democracy were universally accepted as the basis of political life. In fact, however, it is itself in question. And if we are ourselves democrats (if we are not the "leave them alone" view will in any case have no appeal for us) then we must at least hold it to be desirable that our children should grow up to be democrats too. We may gladly encourage and even help them to take their own line, when they reach years of maturity, on socialism and capitalism, on unemployment policy or public finance, even on war and peace: what we cannot do without making nonsense of our own democratic faith is to leave the question open whether democracy itself is a desirable philosophy of life. Here at least we are called upon to pursue the path of conscious and deliberate indoctrination.

These may seem to be mere debating points. But they are in fact fundamental. We *must* ourselves possess a group of beliefs as to the nature of the society in which we wish the younger generation to live. And if these include a faith in democracy—not merely as a form of government but as an attitude to society—then we must also regard it as of the first importance that our children should learn to play their part as citizens of a democratic community. But this implies at the least that they must learn to take an interest in political questions, to form reasoned views on political issues, and (above all) to accept and support the democratic ideal. The "leave them alone" view breaks down because it is self-contradictory. It forgets that the exclusion of politics from education is itself a form of

political education. It relies upon a particular political creed—a creed which it ends by denying.

It seems to me, then, that we must discover some middle course between prostituting education to politics and attempting to make our schools wholly non political. The educational system must somehow be unbiassed—but not negative—with regard to political problems, we must teach future citizens to be open minded without making them empty minded. How are we to do this?

My own tentative answer is derived from my experience as a university teacher of economics. In the matters which I discuss with my class I can distinguish three planes of doctrine, each demanding a method of treatment which would be wholly inappropriate to the others. First there is a wide range of subjects on which the essential thing is that the students should learn to decide for themselves. Such are (for example) questions as to the desirability of controlling monopolies, of extending the scope of public enterprise, of reducing inequalities of income and so on. These are matters in which economic theory cannot speak conclusively, and it would be improper, and even immoral, for me to use such authority as I may possess with my class to *indoctrinate* it with my personal views. In such cases my function as a teacher is completed if I succeed in presenting a fair and objective analysis of the arguments on either side and in stimulating my students to make up their own minds. And if I am accused of not letting my left hand know what my right hand is doing I can only reply that these are circumstances in which no other course would be ethically justifiable. It is not my business as a teacher to advocate a particular policy (however strongly I may favour it as a citizen) if it is one on which differences of opinion are to be expected even among qualified economists.

Secondly there are matters on which economics in my view does speak with a clear voice, and on which it would be self stultifying to pretend otherwise. As an example I may take the free trade issue. There are, of course, non economic arguments in favour of protection, there are even circumstances under which a tariff might conceivably be of economic advantage, if applied with sufficient skill. But the great mass of public belief in tariffs does not in the least depend upon such possibilities, but on a familiar and crude confusion of thought, and it is certain that if people really understood the nature and mechanism of international trade the current faith in protectionism would largely crumble away. This being so I have the right, and indeed the

duty, to state clearly—what is no more than the truth—that most speeches in defence of tariffs are simply silly. I must, of course, show my reasons for this conclusion: and I must also encourage my students to satisfy themselves that it is sound by inviting them, if they will, to try and refute the general case for free trade. But it would be a dull and degrading business if I were to pretend to have an “open mind” on popular economic arguments for protection. Being unbiassed cannot mean expressing *no* definite views on urgent matters of economic policy.

Finally, and behind all such specific issues, there is one matter which is so fundamental for a useful study of economics that with respect to it I must act as an advocate, resisting all suggestions that I may be wrong. The whole function of economics is to help the community to act rationally in the control of its resources. We study international trade because an understanding of it will give people the chance of adopting the commercial policy best able to yield them what they really want: we analyse the workings of the banking system so as to save ourselves from misusing it through ignorance: we investigate the principles determining wages so that we may be assisted in our struggle against poverty and unemployment. All these labours will be completely pointless, however, unless we are prepared to use the knowledge they provide. And economics as a subject of study depends absolutely on the faith that so far as possible action should be rational—that where the consequences of a particular policy can be known it is foolish if not criminal to act without that knowledge. This being so, perhaps the most important duty of a teacher of economics is to instil into his students the conviction that rational action is better than irrational action. They must learn not to judge economic policies by their immediate consequences, but only in the light of a real grasp of their ultimate implications; they must recognise that in the absence of such an understanding they have no right to pass judgment at all on problems of economic policy; they must be encouraged to acquire the analytical ability which will enable them to contribute their share to the rational direction of the world's economic affairs; they must in short accept the postulate without which economic studies are empty and meaningless—the postulate that the human reason, for all its weakness, is an indispensable aid to the wise conduct of life.

This, let us observe, is a matter of faith. It cannot be proved, and there is no room for argument with anybody who would dispute it. There can therefore be no question of the teacher's preserving an open mind and leaving his students to

## ADULT EDUCATION IN INDIA

BY

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### **The importance of Adult Education: its relation to Rural Reconstruction and Primary Education.**

Rural reconstruction may be regarded as the whole problem of Government of the rural side. As this side is four fifths of India, rural reconstruction may be said to be four fifths of the Government problem in India. In other words all problems of revenue and expenditure of Government in India have to be considered preponderantly from the point of view of the rural population. Rural reconstruction means the reconstruction of the health and wealth of Indian villages and improving the means of communication between themselves and with towns. But this is the social and economic side of rural reconstruction whereas education must imply the reconstruction of the intellectual, æsthetic, moral and spiritual side of it. It is Education only that can help the edification of the health and wealth of Indian villages in such a way as to make these self supporting and self-propagating. If education however is confined only to children, not only will rural reconstruction be a slow and tedious process, but the children will have to contend with and overcome the prejudices and ignorance of their elders—which from the very nature of it must be a battle in which rifle fire attempts to capture entrenched positions. It is doubtful what heavy sacrifices will have to be incurred before these positions are captured. Adult education thus not only aids and hastens rural reconstruction, but lures the adults out of their entrenched positions so that these may be captured. We may therefore say that Primary and adult education must go side by side and hand in hand.

### **The three aspects of Adult Education.**

It may be said that there are three different aspects of adult education—the intellectual (in which I include the æsthetic), the physical and the moral or spiritual. With the limitation that we have imposed on ourselves, i.e., Adult Education of the rural population, we must add that we have confined ourselves to four

problems, (1) Adult Literacy, (2) getting the village to make the fullest use of its environment, chiefly through co-operative organisation, (3) the organisation of mass physical education, (4) a moral and spiritual programme.

1. *Adult Literacy*.—On the intellectual side the most important question of adult education is that of literacy. The Christians want every man and woman to be literate so that foremost of all he or she may read the Bible and the prayers and hymns that would be said or sung in the worship of God. Correspondingly there must be similar reasons for other communities. Next to this literacy is of much utilitarian value to the villager who ought to be able to read his *purchas* and *pattas* and take an intelligent part in his dealings with the *Mahajans* or the *banias* in order to protect his own interests. At the present time when the seeds of democracy are being sown in India, when the voter has assumed great importance, literacy is required, so that the voter may take an intelligent part in sending the representative to his provincial legislative assembly who will promote his well-being. Lastly literacy is indispensable to culture, for it enables the villager to amuse and instruct himself. The importance of literacy cannot be exaggerated, in spite of the fact that much education *can* be imparted orally and visually without literacy.

*How can Adult Literacy be rapidly spread?*—Any method by which the literacy of adults could be rapidly advanced should not only be of the deepest concern to us, but if known to us personally would lay upon us an obligation that we could not lightly put away. In the Christian Missions Moga, Dhamtari, Gosaba and other places and by one or two individual non-Christian pioneers elsewhere, research and experiments have been carried on for some years in the methods of teaching reading as adapted to the Indian vernaculars. In Christian missions the story method of Moga and the method which Dr. Laubach had introduced into the Philippines have been widely tried. Both these methods have proved highly successful in teaching adults—six weeks having been found enough for teaching them to read but more experimentation is necessary to discover and determine as to which of the two is better and quicker *for adults*. This is not the place nor is it possible within the time-limit allowed to describe any of the two methods nor to give a comparative estimate of the value of either. Our country offers at the present time great opportunities for a concerted forward movement in teaching adults to read and write. Millions of adults hitherto indifferent are now asking for education. We, educated Indians,



have awakened to the necessity of teaching the illiterate people and of bringing them into direct touch with the best thought of India and of the rest of the world. To take this most important element alone of adult education—the removal of adult illiteracy—it is such a hard task that it can be achieved only through persistent co-operation on a broad front. What is needed is a nationwide campaign and a national organisation to cope with all the aspects of the problem. The problem is not merely one of finding a method of teaching and enlisting teachers to teach by the method, but it bristles with difficult questions which require research and experiment, as for example, of—

- (1) Finding a common basic vocabulary from the several dialects of one language
- (2) Discovering the psychological approach to the adult in different localities
- (3) Discovering the minimum and maximum age limits of the adults within which our work could be most successful
- (4) Applying a minimum test of intelligence within that age so that the work of teaching may be done for those who would most readily respond, as in the beginning to get most results a process of selection *must* be adopted
- (5) Providing suitable literature for the semi literate and the progressive literate, if possible, in the village libraries
- (6) Then there is the difficult question of script—the localised and the more general one of adopting one for All India

It is impossible for one to go into the whole question of adult literacy within the limits of this paper. I would only like to draw the attention of those who are interested to the pamphlet "A nation wide campaign for Literacy" issued by the National Christian Council, Nagpur.

2 *The use of the environment*—Next to literacy the most important question from the intellectual standpoint in Adult Education is to get the rural adult to make the fullest use of his environment and of the knowledge of the results of experiments and research that are being continually made for his benefit. While traditional knowledge is a very good thing and while we

ourselves have the highest regard for that kind of knowledge handed down in the villages from time immemorial, there is such a thing as being hidebound by tradition. Traditional knowledge is like embers of fire which must be fanned into flames by added fuel. Nothing is better for this purpose than visual methods. Actual objects brought to his notice in the village *hat* or bazar, an experiment conducted before his eyes of a new crop or an old one with selected seeds or special manure; a chart, a picture, the cinema are all invaluable aids to visual education. If there is any value in "*earning while learning*" or in "*learning by doing*," then the teaching of a Cottage Industry or of intensive agriculture is a most valuable aid to that kind of adult education which enables the villagers to take full advantage of his environment. It will widen the range of his intelligence, it will bring to him the joy of creative activity and it will increase the possibility of his wealth. From personal experience I can say that the method *par excellence* for enabling the villager to make the fullest use of his environment is co-operative organisation. Co-operation provides an ideal as well as a method. By this method roads have been constructed, huge embankments or bandhs have been made, tanks, channels and wells dug, schools built and teachers maintained, the weaving, the leather and the brass industries expanded, thus making better villages and in the process making the villager more active, alert and self-reliant. What better aim can we have for adult education?

3. *Physical Education*.—With regard to physical education I wish to say only a very few words. Government may provide an adequate organisation and facilities for sanitation such as supply of pure water etc. They may investigate into the problems of nutrition and make out, after investigation, a chart according to local custom of the best diet-table, for a particular class or community, but the will to health and physical fitness must and can be only created by the voluntary efforts of educated Indians. In our country this will to physical fitness is utterly lacking. It can be only created by a nation-wide organisation. Thus we have here a fruitful field for adult education. In my humble opinion we have in the Scout Associations or the Bratachari movement a ready to hand organisation for bringing about in the villages a will to health and physical fitness. Such a will once brought into existence will not only alter the physical but the moral outlook of the people.

4. *A moral and spiritual programme*.—It is not possible for me to deal with adult education and leave out of consideration its most vital and important element, namely, the moral and

spiritual I have the highest admiration from personal knowledge of the Indian villager. His patience and fortitude, his readiness to undergo suffering and privation, his affection for his family, his home, his lands, and his village, his desire never to repudiate his obligations and such like characteristics make him a notable figure in the world. While I say all this I am firmly convinced that one of the primary aims of adult education in India must be to raise the moral and spiritual tone of the people. Just imagine what a tremendous revolution could be brought about in India if only a successful campaign could be conducted throughout the villages of India in which every villager undertakes "to adhere to the truth." If a fairly good percentage of these succeeded in abiding by it, the face of India may be changed. Throughout the world it could again be said of our country what the foreign travellers once said, namely, that an Indian may always be depended on for truth. It is a campaign and a task in which all communities, classes and creeds could join. It is not a fanciful proposition of mine. It is an experiment which we have tried in a very few villages in our part of the country with momentous results. Our plan was to collect the villagers and ask them whether they are *always* truthful, or whether there was a single person who was *sachcha*. Naturally they said "no" or that there was one or two. It was then explained to them what a great thing it would be if all of them could be *sachcha*. They fully appreciated this. A Truth Day was then appointed when all were requested to assemble in the morning after the previous day's fast and prayers according to their own beliefs and a procession was made throughout the village with flags, etc., shouting slogans like "*Satya hi jay*." At the end of it, all solemnly promised to adhere to and speak the truth always.

It is up to the All India Federation of Educational Associations to father and foster a nation wide organisation for adult education which should have for its primary objects the four aspects of adult education that I have dealt in this paper.

# TECHNOLOGICAL CHANGES AND THEIR MEANING FOR EDUCATION

BY

DAVID CUSHMAN COYLE.

Technology has swept through the western world in two waves, one the industrial revolution, the other the present crisis to which history will give a name in due time. The industrial revolution rising out of the steam-engine and the use of heavy machinery, *increased the production of common goods and offered* wholesale transportation. Since 1900 the development of technology has been radically different, giving not merely an increase in old familiar goods and services but the spread of unfamiliar scientific wonders among the people—the automobile, the radio, the movie, the airplane, and a long catalog of new materials such as bakelite and rayon.

The change has been so rapid as to create serious maladjustments between business and our existing laws and customs. The educational system has been thrown into confusion by these new developments, to which its established theories of economics and of pedagogy were not adapted. Business and government, as well as education, are still largely controlled by people who learned in childhood to say, "I could no more do that than fly," or "You can't turn the clock back," phrases that, to a younger generation, have no literal meaning whatever.

The effect of twentieth-century technology on employment has been almost as revolutionary as its effect on the instruments of every-day living. The industrial revolution drew workers out of home occupations into the factory. There many of them became skilled in various jobs, but as technology progressed the machine tender became more and more specialized until he had only a few simple motions to repeat all day long. Now the new technology has reached a point where simple sensory-motor reactions can be imitated with electric instruments. Automatic instruments take care of most routine machine adjustments, stretching out the number of machines handled by a given number of workers. Unskilled labor, occupied largely in moving materials, is replaced by conveyors automatically controlled.

Both manufacturing and agriculture show continuous increases in productive power per man-hour of labor. Both are

reducing their demand for labor, and no change of trend is in sight. Although the market for both industrial and agricultural products could be expanded by a better distribution of income, the technical methods still unused in large areas promise to reduce still further the labor required. Altogether, the signs indicate that surplus industrial workers cannot go back to the farm and that surplus farm workers cannot be absorbed by the factory. The service occupations will have to absorb most of the displaced labor in both industry and agriculture.

The present condition of unemployment can perhaps be most clearly explained as a lag in the expansion of services. Public service has expanded considerably, but is still far short of meeting the admitted need of sound national maintenance. Private services depend for expansion on a more even distribution of money income. Studies of consumer habits indicate that any rise in lower incomes creates a larger market for personal services of all kinds, from travel to beauty treatments and movie tickets.

The youth coming out of school today has before him no such simple, rational social order as that which appeared to welcome the graduate before 1914. He can hardly expect to find a job in which he will peacefully continue to labor with increasing success for the rest of his life. His chosen job may expand for a few years and then suddenly melt away under the impact of some new invention. To prepare for such an uncertain life the modern youth must be as wary and quick moving in his own environment as his pioneer ancestor had to be in the Indian haunted forest. The schools can train him in virtues that will stand him in good stead, over and above the specific skills attached to any particular occupation.

Training for the technical professions and for certain skilled occupations, such as stenography and mechanics, can be given in school. But many skilled jobs are special to each industry or even each company, and the workers are trained on the job. Semi-skilled occupations are also usually best taught by the employer.

But several kinds of training that can be done by the school are as yet undeveloped. Employers are greatly impressed when they discover a boy or girl who can read, write, and cipher in the modern sense of the word. A youth who can read a set of directions containing 20 separate items, and with the card in his hand know what to do, is a joy to any boss, a rare find that does not pop out of every schoolroom door. Another *rara avis* is a person who can write an understandable report, or who can put an idea into words that have some recognizable meaning.

Finally, the average school graduate has a vague notion that 70 per cent is passing, and may take years to learn that in adding a column of figures on the job the passing mark is 100 per cent.

Responsibility is a less definite but important virtue. In its commercially valuable form it means that a young employee is on the job and can judge reasonably well when to obey orders, when to use his own judgment, and when to ask the boss. The schools have never developed an effective method of teaching responsibility, perhaps because in the past children learned it at home. Modern technology with its elaborate specifications has opened the way for a habit of blind obedience to orders and of passing the buck in case of accident. Since the blueprints are not always divinely inspired and accidents will occur, a worker who can keep his eyes open is peculiarly valuable, and unfortunately rare.

In general it may be said that while in certain occupations the student with specialized training has a definite or even a vital advantage, modern conditions change so rapidly and unpredictably that specialized training alone is an unsafe investment. The worker in almost any trade or profession must be prepared at any moment to take a death-defying leap for life as his job and his whole familiar setting explodes under his feet. If in addition to his special skill he has the ability to learn quickly, to express himself clearly, and to grasp the meaning of an unfamiliar situation, adapting himself easily to a subordinate place and recognizing the proper openings for initiative and responsibility, his chances of landing on his feet are correspondingly increased. It is impossible to avoid all accidents in this fast-moving world, but the less helpless our people are by training, the fewer casualties will have to be picked up by the stretcher-bearers.

—*School Life.*

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"We are learning to look upon the education of the child during the pre-school years as an asset or the lack of it as a liability to the welfare of the State."—Uel W. Lamkin, President, Northwest Missouri State Teachers College.

"In my judgment the greatest value of kindergarten experiences in the life of the little child, lies in the early introduction to social contacts, with its consequent necessary adjustments, and, again, in that early attention may be given to the development of right habits of living, feeling, thinking and doing."—Ralph E. Wager, Dept. of Education, Emory University, Georgia.

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# CURRICULUM AND TEACHING<sup>1</sup>

BY

RAI SAHIB D N MUKERJEE,

*Secretary, U. P. Board of High School and  
Intermediate Education*

## The Changing Curriculum.

There are certain important tendencies which are characteristic of modern progressive schools and which must be noticed for the purpose of reconstruction of the curriculum. It is a sad commentary on our present educational system that it still desperately clings to old aims and methods, while the social, economic and political life of the country is advancing by leaps and bounds, with the result that the longer educational reform is delayed the wider will be the chasm which our schools and colleges will have to negotiate before falling into a line with the life of the country. That this criticism is true is amply proved by the efforts made since the days of the Sadler Commission (1919) to reform secondary education in this country—efforts, which have constantly failed to grasp the needs of the changing times and build a satisfactory curriculum out of those needs.

The present 'standard' or 'traditional' curriculum, having been built out of the past by students of academic outlook and temper, has got itself organised into a body of narrowly divided 'subjects,' which care very little for the growth and development of the scholars or for the needs of their life, immediate or future. With this narrow and patchwork nature of the curriculum it is very difficult for teachers to recognise and realise the two fold nature of school work, *viz.*, to enable children to grow up as tolerant and understanding human beings living in the midst of other human beings like themselves, and to secure the fullest possible development of the powers and potentialities of individual pupils.

"Educators confront an enormously difficult task in the education of a child, a complicated organism growing up in a social world of essentially self-centred people, building meanings into his experiences in the midst of a group of mental and

<sup>1</sup> From the writer's forthcoming book, *An Outline of Secondary School Organisation*, The Indian Press, Ltd., Allahabad

emotional worlds in which common meanings are almost entirely lacking. This child, defending himself from infancy against the physical world, against social pressure, against all the necessities of conformity, is given to a school for a few hours a day, and the task is placed upon the curriculum-maker of building a curriculum, an environment of activities—reading material, discussions, inter-play of mind and mind—which will steadily, from the first year of the primary schools to the top year of the High Schools, take that child in increasing maturity to tolerant understanding of the world about him . . . .

“ . . . . the curriculum-maker must find by experiment ways of organising the curriculum in a problem-solving form, so that modes of living will be studied in the form of alternatives and options, thus giving the child a training in choice as well as in decision. This organising of the curriculum means another abrupt departure from conventional practice. Educators cannot hope to introduce youth to an understanding of modes of living if they persist in their century-long habit of putting both the personality of the child and of the civilization in which he is living into narrow academic compartments, isolated each from the other.”<sup>2</sup>

Reforms in the school curriculum in the West have generally followed two main lines, *viz.*—(1) that part of it which is concerned with knowledge and skill; and (2) that part, comparatively new to this country but extremely important as shown by modern psychology, which deals with ‘creative self-expression’ on the part of the child.

### Knowledge and Skill.

Whenever we think of the purpose which dominates the practice of education in our schools and colleges we cannot but feel that it is extremely narrow, meagre and often thoughtless, with hardly anything sensible or tangible to do with the vital necessities of the scholars’ lives. Even the imparting of knowledge, of which so much has always been made, is hardly anything more than the imparting of scrappy bits of information, which are mostly forgotten as soon as the examination is over and which are never woven or built up into a unified body of permanent knowledge. In fact, hardly any emphasis is laid on the methods by which knowledge is properly acquired by the pupils, with the

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<sup>2</sup> Harrold E. Rugg, in *Towards a New Education*, Ch. VI, pp. 199-200.



result that the natural abilities of the growing human beings are left to work by themselves. What a poor attitude shown by the teachers towards their profession and towards the children placed under them!

If, however, teachers can be made responsible for this poverty of outlook with a consequent poverty of education in their pupils, the blame has to be equally shared by the curriculum makers, who are completely swayed by examination considerations and nothing else. Teachers do what they are required or expected to do and they would continue to fail to do those things which are only vaguely expected of them. Memorised knowledge, being more tangible and more easily examinable than other educational results, has steadily come to occupy the most important place in our educational scheme, but the processes by which new knowledge is acquired,—all those 'skills' or 'abilities,' which are at once the basis and product of education,—are seldom handled consciously, deliberately and systematically by educators. They would certainly receive more attention and careful treatment if less emphasis were laid on knowledge which had already been acquired and hence served its purpose and more importance attached to the children's ability to acquire new knowledge, to tackle new problems and to face new situations. It is this ability that should be the principal purpose of teachers to train and develop and of examinations to test in a sensible, systematic and scientific manner.

It is most unfortunate that the word 'skill' is misunderstood in much the same way as the word 'knowledge,' for it is generally believed that subjects like the three R's and History and Geography impart 'knowledge,' whereas Drawing, Manual Training and other practical arts impart 'skill' to the pupils. A little thought would show that the theoretical or informational subjects, too, have a good deal of skill to impart,—the skill to write and speak in the most appropriate language, to think and analyse correctly, to command the intellectual processes in different situations, while the so called 'practical' subjects have a considerable body of knowledge or information to impart to the pupils. In fact the two terms 'knowledge' and 'skill' can hardly be separated from each other during the process of education and the curriculum makers would do well to tell teachers that the latter are expected to use the prescribed or suggested courses of study as the means for developing skill, using the word in a manual as well as intellectual sense rather than being satisfied with testing the retention of a body of disjointed and memorised knowledge by the children.

## Teaching Methods.

Prof. Cyril Burt of London, while conducting an investigation on the effects of mass instruction on the intelligence and attainment of pupils, got results which point to very important conclusions. He calculated, for the purpose of comparison, the "Mental Ratio" and the "Educational Ratio" of different groups of children, and found—

- " (1) that children who are most retarded mentally appear still more retarded educationally (M. R. 79·6; E. R. 78·9).
- (2) that there is discernible an effort, by no means sterile to coax and coach the milder dullards to a grade more closely fitted to their actual age (M. R. 93·7; E. R. 95·8).
- (3) that children, who are slightly above the average, despite superior talent, are largely kept back scholastically (M. R. 106·9; E. R. 102·2).
- (4) that the ablest children are deprived of more than half their advancement and over ten per cent of their mental age (M. R. 123·1; E. R. 111·2)."

"Thus there is a strong disposition to level a child's school work up or down towards the common standard for his age."<sup>3</sup>

This perpetuation of mediocrity and retardation of the 'genius of the race' can never be ignored by any sensible or honest person, however much he may follow "convenient" methods of teaching in the classroom. In fact, it is the school-master, actually at work in the midst of his pupils who was compelled by his conscience to break through the thralldom of "Method" as evolved by Herbart half a century ago and adapt his procedure to suit the vital needs of childhood and adolescence by means of such well-known educational devices as the Dalton Plan, the Project Method, the Winnetka technique and so on. Freedom from too much domination and intelligent cooperation between teacher and taught in achieving the highest aims of education are the basis of these and all other similar so-called "modern" developments and every teacher would do well to study the child's ways and let him have full scope for growth and development.

"Education goes beyond the acquisition of knowledge, and means a training in right habits and right thoughts and these, in

<sup>3</sup> Burt: *Mental and Scholastic Tests*. pp. 175-76.

their turn, should blossom into right conduct and good character

Teaching is a cooperative effort in which both partners work alike,—those who learn and those who teach. The co-operation which we have sketched entails a training in certain good habits and the cultivation of certain good qualities. It can be accomplished only by steady fostering of honesty, punctuality and perseverance, it should stimulate and satisfy a spirit of enquiry, and it calls for self reliance and a willingness to face difficulties including necessary drudgery. It should cultivate a promptness of response on all occasions, a habit of self control, of which the fruits are accuracy and exactitude, tidiness and carefulness, all manifested in a measure appropriate to the child's age . . .

"Finally, beyond the qualities so far sketched there lie even loftier constituents of good character, reverence, a perception of beauty and of goodness, with a sense of ultimate realities culminating in religion. These lie outside the art of teaching considered as craftsmanship. But they do not lie outside the teacher's duty."<sup>1</sup>

### Creative Self-Expression.

Now we come to a subject which is the dominating feature of the most modern conception of education but which is totally lacking in our school system. Savants and teachers in advanced countries are telling us that the old rigid curriculum is the result of adult experience and that most valuable educational results are achieved if the courses of study and the methods of instruction are allowed to be evolved on the basis of children's spontaneous activities. The word 'spontaneous' should not be taken to mean 'unrestrained' or 'unguided' but rather understood as 'unrepressed,' our educators have yet to realise that, by sticking to the traditional system of imposing adult methods and adult experience on the children, they have always deprived themselves of wonderful and valuable knowledge which freely active children impart to the rest of the world. "The artist in the child" has incessantly been crippled and destroyed by adult arrogance, the child as a 'creator' is almost unknown to our parents and teachers.

But those who have tried to translate their methods and subject matter in terms of child life have found that the process of education undergoes a remarkable transformation stirring up the living interests of scholars and pointing to procedures and

<sup>1</sup> Ward and Roscoe *The Approach to Teaching* Ch. XIV

results hitherto unknown to the conservative teacher. With great faith in nature's own ways and in the human powers, the new educator has set the child free from adult restraint and impatient interferences in an atmosphere of joyous self-activity and has been gratified to find the child developing into a wonderful creator and artist, with powers seldom allowed to express themselves in any form in our schools.

We have already seen that knowledge and skill have so long occupied the largest amount of attention in our schools, the learning process being that of acquiring facts and of generalising them and indirectly of developing certain skills as a side issue. The emotional and artistic sides of child nature have not failed to engage the teachers' attention but the method of teaching has been mere imitation with little of *original* creation. The individuality of the child has seldom been allowed to express itself in its own way; the cramped and unsatisfied imitator, which the teacher of art in our schools usually is, lacks the vision, the patience or the inspiration which only can enable the artist to keep up the divine urge in himself and in his pupils.

Our schools have yet to realise that rhythmic education aims at awakening and promoting many creative forces which at present are allowed to pine and fade in childhood; that the rhythm of the body and its movements can be expressed adequately only after careful training; that the elements of music as naturally indicated by movement, song and improvisation in normal children can easily be stimulated and directed with highly educative and valuable results; that proper *art education* awakens the creative ability of the child and later on guides the directive activities of the youth "by opening up a new way of looking at the world, by giving a view, on the one hand, of an ultimate harmony in life, and on the other, of humanity, seeking to fit the fragments of its experiences and activities into this ultimate harmony—not by escaping from the world by way of romance, but by recreating it;" that *literature* and *drama* do possess valuable, though intangible, connection with the emotional life of children, whose intuition and simple yet graceful rendering and imitation wonderfully harmonise with the spirit of the plays. If teachers want to do something to avoid the emotional starvation of our children they must read accounts of experiments conducted in the West on the teaching of the various arts to small children and see how one vital phase of child nature has been totally neglected for generations in our schools with consequent evil effects on our whole national welfare and efficiency. The technique of imparting art education and developing the creative

abilities of children by providing full scope for their self expression in as many different ways as possible has to be learnt by every teacher, for, whatever the subjects he is required to teach, he will always find that, with greater freedom allowed to the pupils for self expression in a large variety of ways (and not merely through speaking and writing in a slipshod manner as at present), they show marvellous improvement in all directions and develop into cheerful, confident and lovely human beings, who show characteristics quite different from those shown by the nervous, unbalanced, restless and incomplete products of our present educational system

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### A BOY AND A BIKE

A boy, a bike, and an open road,  
 A jiggle, a bump, and a jog,  
 A rustle of leaves and a blinking toad,  
 A tree, a fence, and a bog,  
 The things he does and the things he sees  
 Are the things he knows and likes,  
 A muddy pond and a clump of trees  
 Were made for a boy with a bike

—MRS FRANK BURACEK

### ALADDIN'S LAMP

Little child, don't be so tragic  
 Because your firm belief in magic  
 Has been rudely shattered  
 As though that mattered!  
 In a very short time you will learn how to read,  
 And that's all the magic you will ever need!

—ROMA EVANS IVES

—National Parent Teacher

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## SELF-HELP COLLEGES

BY

ELLA B. RATCLIFFE.

There is in the United States a small group of colleges that is distinctive by reason of the fact that all students are required to work. Under supervision, they assist with the work necessary for the functioning of the institution, or work in some industry set up by the college to provide extra employment. These so-called self-help colleges are located for the most part in the South, where a tradition of student labor has survived for three-quarters of a century.

The idea of student labor originated from the desire to make educational opportunities available to underprivileged young people, by permitting them to work for their college expenses. This is still the basic reason for the work requirement, but with experience there have come to be recognized certain values in the work itself. Observation has convinced the college authorities that a brief period a day spent in some kind of useful work is a desirable substitute for the time usually given by college students to sports and other extra-curricular activities, and contributes more to their physical, mental, and spiritual welfare. It is, further, a means of bringing the educational experience into closer relationship with the work students will do after leaving college.

For these reasons and because of the ill effect on morale of having some students serve the remainder, these institutions require every student to work whether his financial needs make it necessary or not. In all self-help colleges the time given to labor by students is about two hours a day. Those who desire to work longer and earn more may do so, if the work is available. In such cases the academic load is reduced.

To make the work requirement absolute, most of the self-help colleges have had to create work beyond that needed for running the institution. They have therefore established on their campuses such industries as printing, weaving, metal crafts, wood-working, and broom-making. They have set up their own laundries, bakeries, and canning factories. Nearly all of them have their own farms on which students produce food for the

dining halls. A number of the colleges have thus become practically self sustaining, an aim which all wish to achieve.

Tuition and fees are kept very low so that all students may earn enough to pay the greater part of them. A considerable number, through extra work, make enough to pay for all.

Democracy and simplicity are fostered at the self help colleges. There are usually prohibitions against drinking, smoking, secret societies, intercollegiate games, and fancy dress. At one institution, uniform dress is required. The boys wear overalls, the girls chambray dresses and sunbonnets. Religious observance is also usually required, although most of the self-help colleges have no church affiliation. An exception is a group of ten institutions controlled by the Seventh Day Adventist Church.

Probably the oldest of the student labor programs is that of Berea College in Kentucky, which dates from 1855. An interesting requirement at Berea is that students must apply for their jobs as do workers in outside industries. If a student loses one job, it is his responsibility to look for another, and he must at all times have one.

Work required to run the college provides for 76 per cent of Berea's 2,000 students. The remaining 24 per cent work in a variety of industries set up by the college. To encourage the revival of such mountain household arts as weaving, knitting, basket making, etc., Berea organized its Fireside Industries. It followed this with the setting up of a broom factory, a weaving factory, and a woodcraft department. Other industries have been added from time to time. The college owns and operates with student labor a campus hotel for visitors, a gift shop where articles made by the students are sold, a laundry, a college press, a college store, and a bakery, a creamery, a cannery, and an ice plant, which supply both college and outside customers.

All the self help colleges report many more applicants for admission than they can accommodate. The primary object of student labor is to make higher education possible for boys and girls who would otherwise be deprived of it. But the idea of work as part of education itself is gaining ground. Evidences of this are the increasing number of self help colleges, the co-operative plans of education and industry, particularly in the engineering field, and the character of the jobs students are permitted to take. Self help colleges are therefore distinctive educationally as well as financially.

## DIFFICULT CHILDREN

BY

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*Principal, M. N. K. Bhatia High School, Bombay.*

The recent suggestion of the All-India New Education Fellowship to encourage parent-teacher cooperation comes to the teacher as something that makes the school work more efficient though none the less exacting. Every teacher who pays sufficient individual attention to the child knows the difficulties of dealing with what are termed as 'Difficult Children.' Although these are never promiscuous to form a class by themselves, yet theirs is the behaviour, which more often than not, hampers the work, and gives a sort of setback to the teaching, and learning of the class. But more hazardous it would be for a teacher if he were, in trying to deal with these Difficult Children, to look to a book of rules for the guidance of the teacher, to better the lot of these children. As it is, some working principles may be laid down.

Thus, for example, the paramount influence of 'home' on the behaviour, the moulding of the character of the child, is to be reckoned as one of the principles, and the determining of the good or otherwise of this influence should be the first task of the teacher. For most of the bad behaviour of the child in the class has its origin in the 'home.' Thus the cause of the ever-readiness of the boy, who in and out of season thrusts in answers without any regard to other children in the class who suffer on account of such a behaviour, is to be traced to his treatment in the 'home.' This 'pining' to be always at the head of the class, whether justified or not, is generally the result of the repression of the child in the home or the overfondness of the parents for the child. To remedy the latter case, it is important to notice that a slight reprimanding will put the child in the proper course, but no attempt to humiliate the child should ever be made. However, in the case of repression it is necessary that every liberty should be given to the child for his fullest self-expression which should be so modelled that it flows in the proper channel for useful pursuits such as to help those who lag behind in the class or to do some constructive work.

On the other hand, the task of dealing with the day-dreaming children appears to be more straining on the teachers, for both the power of persuasion and sympathetic behaviour, as well as an insight into child-psychology, are taxed. In order to stop this



day dreaming in the class it is requisite to know whether it is done with a view to fly away from reality or whether it is the result of the unfortunate carelessness of the parents in dealing with this habit of the child, which, if not indulged in at the wrong place and wrong hour, is a healthy characteristic of full development. After doing this, a talk with the child mildly and delicately so as to extract his behaviour in the home, will do an immense service to the solution of this defect. To ensure the efficaciousness of this talk the tender looks of the teacher at such children in the class may prove to be beneficial. These might serve as a link which the teacher and the child know, but none alludes to. Now, in the case of those children who are afraid to demonstrate their oral work but are ever prepared to work out practical exercises, it is significant to note that they belong to what are termed as 'hearing children,' whereas, for those to whom the writing work becomes a boredom, something that lies heavy on their heads, and the oral work something that delights, it is profitable to note that they are the members of the 'seeing' class. But investigations should be made to improve the lot of these children, for at present they are merely left to themselves having been labelled as defective in sight or in observing sound.

More frequently does a teacher meet a child that is absent minded about his things in the class. To give an effective antidote to check this wandering and drifting attention of the child, which is often a bane to the teacher, a good service will be done if the activities of the child outside the school rooms are known. It will be generally found that either some highly romantic or thrilling reading in the house or a series of Test matches or a sensational pronouncement of certain games is the cause. An urging, times without number, a proper revision, and attention into the class will go a long way to improve the defect.

But a more difficult to treat problem that looms in the lime light in the class is the case of those pretending innocence but slyly mischievous and sufficiently insolent children, the case where the scuffle between the teachers and these children might go heavily against the work and the discipline of the class, and result in the complete and severe defeat of the teacher. Shrewd and intelligent by nature, reserved and reticent by the awareness of the fact that they are intelligent, clever and skilful owing to the confidence placed in them by others, these children manifest their insubordinate behaviour either in subtle gestures or in the manner of their walk, or in their general behaviour. A searching inquiry will reveal that the cause of this bland insolence is the child's unhappy situation either in the 'home' or in the 'school,

a bland insolence into the most ruthless and distrustful attitude towards men and women. But to guard such children from becoming incurable it is necessary that they should, if possible, be psycho-analytically treated and cured of this defect in their earlier days.

A logical conclusion from the above is that the full information concerning the home-activities of the child and its treatment in the home by the members of the family is of vital importance in treating the Difficult Children. It is here that the question of co-operation between the parents and the teachers comes. And if any solid work is to be done in the cause of education it will be a fruitful thing if the parents by supplying all the necessary information help the teachers to do their best in making children have a thorough education. Not less important is the second truth that the occupation of the child should be duly proportioned to the child's capacity and ability. But to get at a proper solution of things it is necessary to make a thorough and penetrating analysis and inquiry into the capacities and behaviour and character of the children. The growth of the science of psychology and psycho-analysis have rendered it possible to arrive at certain important results after proper inquiries of a more scientific and consequently helpful basis. Such a scientific investigation into the various problems connected either with the 'difficult,' or with the 'problematic,' or with the 'backward' child is today as much important and necessary for India as for any other country. An establishment of such a psychological Laboratory equipped with a qualified professorial staff would prove a great boon to the cause of education at present or in the future, in this country.

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Occasionally school marks mean less than nothing. Einstein failed in mathematics. Hendrik van Loon failed in history. Grammar schools called Darwin and Rousseau stupid, and dropped them, while Shelley's and Poe's low marks kept them from finishing school. A high school failure in physical science barred Marconi from university training.—*Clearing House*.

No other nation can mean to us what our nation means. Here are the roots of our heritage, and here our central loyalties belong. But because we feel so deeply about our own land, we understand how other people feel about their lands, and using our patriotism to interpret theirs, we grow, not in bitterness but in understanding and sympathy. So all fine internationalism must be rooted back in the noble significances of nationalism.

—FOSDICK.

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## THE INTERPRETATION OF SCORES IN TESTS AND EXAMINATIONS

BY

S A COURTIS

The need for appraisal of teaching effort is universal, and the use of some form of test or examination has been a distinctive feature of educational programs from primitive times to the present. Among primitive peoples this need for a test is satisfied by competitive contests of strength and skill, and wherever primitive conditions prevail such contests are still the accepted form of test. For instance, in prize fighting the actual fight is the measure of the success of the training to which the contestants have been subjected.

It is not strange, therefore, that *achievement* should have come to be the critical factor in interpreting tests and examinations. However, the written academic examination, while it is judged in terms of achievement, represents a curious modification of the achievement concept. We assume that if the individual can achieve in the test, he will achieve correspondingly in life. Actually, an examination might conceivably be an excellent instrument of appraisal of what was taught in a given course and yet the achievement measured might be a worthless basis of prediction. The opposite is also possible.

Most of us today to some degree recognize that raw achievement in a test or examination needs much interpretation before its significance can be ascertained. Intelligence, we believe, is a factor influencing scores. Researchers agree that there are many other factors, very many, which similarly affect achievement and make it difficult to tell what a score means. Yet the influence of the primitive respect for achievement leads many persons to keep right on interpreting raw scores as if they were satisfactory predictive measures of life achievement.

The purpose of this paper is to generate doubts about the conventional attitudes toward achievement scores in tests and examinations. Let's begin with one of the final examinations given to 21 graduate students who took a course called "Educational Tests and Measurements" at the University of Michigan last semester. The test consisted of 50 multiple choice questions

testing the student's ability to discriminate among four definitions of certain key concepts and terms discussed during the semester.

In terms of the number of questions answered correctly in 20 minutes the achievements of the class ranged from 9 to 29. The midscore was 18. Certain individuals had the same achievements—for instance, individuals L, M, N, and O each had 17 answers right. But L had tried 31 questions, M, 32, N, 37, and O, 44. Clearly, L's achievement of 17 is better than O's.

It seems reasonable to try to "correct" the scores in number right for accuracy of work. We have experimental evidence that, in general, as a person increases his speed he decreases his accuracy. Let us, therefore, determine the rate scores at the average accuracy level. The median individual accuracy, 43 per cent, was chosen as standard and the adjusted scores computed by the formula

$$\text{Adjusted score} = \text{Number Tried} + \left( \frac{\text{Accuracy} - 43\%}{4\%} \right)$$

That is, it was assumed that an increase in speed of one example would lower the percentage of accuracy 4 per cent. This correction applies only to speed-accuracy adjustments. Probably some of the changes were caused by differences in effort, but at present no method of measuring effort is known.

By the adjusted scores, only 5 of the 21 students have the same rank as at first. A third of the class would be moved up or down from three to six places. That is, by simply changing the basis of scoring, the interpretation given a student's performance changes greatly.

But there are other factors for which correction ought to be made. What about intelligence? When the scores of the class in the Otis quick-scoring test of mental ability are compared with their adjusted scores in the examination there appears to be some relation between the two on the lower ranges of achievement but not on the upper. At all levels marked exceptions occur. Do these mean that the Otis test might also be scored in a variety of ways and that some other method of scoring might lead to a better correlation? Or are there other factors to be considered, such as the student's knowledge of the subject at the beginning of the course?

In this connection, at the outset of the course the students were given an inventory test of 307 items taken from glossaries in various texts on educational measurements. It was a subjective test. The students were merely asked to estimate their degree of familiarity with the various terms.

On the average, the class judged that it had mastered 41 of the 307 items, that it knew well enough to use with the aid of a text 48 items more, that in addition it "understood" 69 items, that it had heard about 59 others, and had never heard of 91.

The best prepared individual, "D," considered that he had mastered 167 items before entering the class, knew 32 more, understood 32 others, had a hazy idea of 20 more, and found 56 which were new to him. At the other extreme, individual "R" had mastered and knew no items, understood but 35, had a hazy idea of 7 more, and had never heard of 263. "D" had been actively using tests professionally for several years, while "R" was an inexperienced student teacher. Should equal final achievement be expected from such diversity of previous preparation?

This test was repeated every six weeks. At the final test the class had mastered 163 items, knew 67, understood 42, was hazy about 21, and didn't know 10. In other words, at the outset "D" was better prepared than the class was at the end of the course. "D" also made a higher score in the Otis test. Should not such differences be allowed for in evaluating achievement? Most of us would answer yes, but immediately ask, "How?" That, of course, is another story.

We long for a method of interpretation that would yield a simple unambiguous score of the amount learned. Differential tests offer a possible solution. For instance, the final examination previously referred to was given as two tests of 25 items each. The two tests were identical except that the first 25 items were those best known at the outset, while the second test was composed of the 25 items least known at the beginning of the course. That is, one test was easy and the other hard. Each test was scored for rate and accuracy.

On both tests the class scores in rate were 21 questions attempted in the time allowed, but the accuracy fell from 46 per cent on the easy test to 42 per cent on the hard test. The theory of differential testing is that since intelligence, speed, previous experience, etc., affect the score in both tests alike, the relation between the two scores is a measure of ability. That is, if an individual's score, *whatever its achievement level*, falls little from the easy to the hard test, it means that he is able, while if it drops greatly, it means that he has not profited by his study.

Note that the class accuracy was not high on the easy test, composed of items mastered before beginning the course. Why? The students' answer was that the test was preceded by a two

hour examination in another course, and they were so fatigued that they could scarcely think at all. Fatigue would satisfactorily account for the low scores, but in the theory of differential testing, it would affect the score in both tests equally. Actually, individuals responded very differently to the differential tests. In some the fatigue increased as the examination proceeded. In others the stimulus of a new type of test led to *better* scores on the second and harder test. No consistent type of response was found.

In other words, raw achievement scores measure achievement and nothing else. What is achieved today is no measure of what will be achieved tomorrow. Each new test and each new situation will yield a new achievement score, and the results in any test will yield as many scores as there are methods of scoring.

After 30 years of study my conclusion is that no single test and no battery of tests yields unambiguous information about the quantities that educators wish to measure. We do not yet know how to measure in the scientific sense a single human quantity.

The interpretation of our present test scores is a matter of scientific deduction (intelligent guess-work) and very difficult. Before even a beginning of success in interpretation is achieved, two further advances will be needed. First, a measure of effort must be invented so we can tell how hard an individual is trying. Second, we shall need to measure and remeasure the individual many, many times and judge his progress in terms of *his own growth curve* and not in terms of age or grade norms. Marks have no consistent meaning when applied to individual achievement scores. Each personality is unique; his scores have a unique interpretation.

We can claim to have the beginnings of a science of education only when the achievements of an individual in different tests and under different conditions can be so interpreted that they all yield the same picture of ability. An individual's ability does not change from test to test any more than the atomic weight of oxygen changes from compound to compound. Let's not deceive ourselves into believing that we have made much progress in really measuring what we want to measure. So far, our achievements are limited to describing with a fair degree of unambiguity what the individual does in a test, not what that achievement signifies.

—*The Journal of Educational Research.*

## THE XIV ALL-INDIA EDUCATIONAL CONFERENCE, 1938

### I Invitation

On behalf of the Reception Committee of the 14th All India Educational Conference, we have great pleasure in extending to the readers of the Journal a very cordial invitation to attend the Sessions of the Conference which will be held in Bombay from the 26th to the 31st of December, 1938. We are extending this invitation to Educationists, Directors of Public Instruction of all the provinces of India, Heads of Education Departments, Heads of Educational Institutions, University Professors and Lecturers, Administrative Officers, and Teachers in Government and Non Government service, as also to all ladies and gentlemen who are interested in the cause of education.

(Sd) V N CHANDAVARKAR,  
*Chairman, Reception Committee*

(Sd) H V HAMPTON,  
*Chairman, Executive Committee*

(Sd) C A CUMSTIE,  
*General Secretary*

### II The Conference—Its History and Importance

The All India Educational Conference is held each year under the auspices of the All India Federation of Educational Associations. The Federation consists of Teachers' Associations and Educational Organizations which are affiliated to it. Being an All India body, it exercises a wide influence in the educational matters of the country and its voice is heard by responsible Government authorities. Its annual Conferences in the past were presided over by eminent educationists of widespread reputation, such as, Sir C. V. Raman, Sir P. S. Sivaswami Iyer, Sir S. Radhakrishnan, Dr. Zia ud Din Ahmed, Mr. Syama Prasad Mookerji and Mr. C. R. Reddy. At the invitation of the Bombay Secondary Teachers' Association, the 14th Session of the Conference will be held in Bombay during the coming Christmas holidays.

Today, when popular Governments are in power in almost every province of India, when educational matters occupy a prominent place in the programme of each provincial Government and when all over the country the cry has gone up that educational reconstruction and re-organisation are problems that demand immediate solution, it is extremely important that educationists should express their well considered opinions on these vital matters. This Conference will provide ample opportunities to all who are engaged in this nation building activity to come together and discuss the various problems concerning education in India.

### III. The Working of the Conference.

In order to make the Conference as comprehensive as possible problems pertaining to all branches of education are discussed in eleven sections which are provided for in the programme.

### IV. Dues and Donations.

The fees are as follows:

Delegation Fees Rs. 2 only.

Reception Committee Membership Rs. 5 only.

Visitor's Fee Rs. 2 only (minimum).

Those paying a minimum contribution of Rs. 50 each will become 'Patrons.'

Schools and other Educational Institutions paying minimum contribution of Rs. 10 will become 'Donors.'

Donations and fees from other parts of the Bombay Presidency should be sent to the General Secretary, the All-India Educational Conference, Robert Money School, Bombay 7. Cheques should please be made payable to "The All-India Educational Conference."

### V. The All-India Educational Exhibition.

The value of an Educational Exhibition is now too well-recognized to need any emphasis. Handwork is "Learning by Doing"; and as it has its place in every well-organised scheme of education it is given its due importance at every Conference. The Reception Committee of the Conference have, therefore, decided to organise an Educational Exhibition on an elaborate scale. The Exhibition Committee requests all Schools, Colleges, Training Colleges and other educational or technical institutions to co-operate with it in making the Exhibition a success. It will be the endeavour of the Committee to organise the Exhibition so as to make it useful not only to the teacher but also to the general public, by demonstrating through numerous exhibits what the modern educational outlook, and what modern education as an art and craft is or should be in the hands of the modern teacher.

The Exhibition Committee invites all teachers' organisations and educational institutions to send their exhibits to the Secretaries of the Committee so as to reach them before the 22nd of December. In order, however, to facilitate the accommodation of the exhibits, it is very necessary that they should intimate to the Secretaries before the 10th of December the nature and approximate number of the exhibits to be sent. The exhibits should consist of maps, charts, diagrams, manuscripts, models, scientific instruments and appliances, laboratory apparatus, specimens of handwork, paintings and pictorial sketches, drawings, calligraphic specimens, needle-work and such other educational aids. The Exhibition will also contain sections pertaining to handicrafts and technical work and village industries.

The Reception Committee is trying to obtain concession from the Indian Railway Companies for the transport of the exhibits to and fro.



Those desiring to send their exhibits are, therefore, requested to communicate with the Secretaries of the Exhibition Committee and ascertain from them what concessions, if any, will be allowed by the Railway Companies.

All other correspondence in respect of the Exhibition should also be addressed to the Secretaries, Exhibition Committee, Esplanade High School, Hornby Road, Fort, Bombay. The exhibits, however, should please be sent to the Secretaries, C/o the Principal, St Xavier's High School, Dhobi Talao, Bombay, and must reach Bombay before the 22nd of December.

Schools and Institutions in Poona wishing to send the exhibits should please communicate with Principal N. G. Naralkar, Nutan Marathi Vidyalaya High School, who has kindly consented to bring them to Bombay.

## VI Publishers' Stalls

Along with the Educational Exhibition there will be Publishers' Stalls, which will exhibit books of educational interests, School and College text books, charts, maps and other educational apparatus, etc.

Accommodation will be reserved for the Publishing firms on application to the General Secretary, before the 10th December. The minimum charge for accommodating a stall is fixed at Rs. 25. Firms desiring to have more than one stall may have them at *pro rata* rates.

## VIII The Eighth All-India Teachers' Tennis Tournament

This Tournament is open to all ladies and gentlemen educationists, administrators and inspectors who are delegates to the Conference. A valuable Trophy viz., the Rai Saheb Batuk Prasad Trophy is awarded to the winner, who also receives the first P. K. Telang prize the Runner up receiving a second prize. The Entry Fee is Rs. 2 per competitor and the last day for receiving entries is the 22nd of December 1938, they should be sent to Mr S. A. Rauf, M.A., B.T. Tennis Tournament Secretary, Secondary Training College, Dhobi Talao, Bombay. He will supply all entrants with the rules and regulations.

## VIII Hand-Book of Bombay

The Reception Committee will publish a Hand Book of Bombay containing descriptions of many interesting places. Every educational institution in the Bombay Presidency is invited to send a short paragraph regarding its history and special features. These will be published in the Hand book. Donations, however small, will be gratefully received from all educational institutions to cover the cost of printing. The Hand book will be made as attractive as possible so that it can be preserved as a souvenir.

Advertisements of Publishers, Book sellers, Chemists, firms dealing in scientific apparatus or any articles, aids or appliances useful to educational institutions will be inserted in the Hand book at moderate rates. Further particulars can be obtained from the General Secretary.

### IX. Excursions and Entertainments.

Bombay, *Urbs Prima in Indis*, has many interesting places which the visitors would like to see. The Excursion Committee proposes to fit into the programme a scheme by which delegates will be able to visit many of these places. The 31st of December has been reserved for a SPECIAL EXCURSION to Elephanta Caves and a Cruise in the Harbour; the charges for this will be announced during the Sessions of the Conference.

This Committee will also arrange for Variety Entertainments in the evenings.

### X. Site and Accommodation.

Realising the great inconvenience caused to delegates by holding different functions of the Conference in different places, we have tried to centralise most of the functions in one locality. The Principals of the Secondary Training College, St. Xavier's College, St. Xavier's High School and the Elphinstone High School, have willingly placed their buildings, which adjoin one another, at the disposal of the Conference. and they will be used as given below :—

The St. Xavier's High School for Exhibition, Stalls and General Sessions.

The Secondary Training College and the Elphinstone High School for Sectional meetings and meetings of the Council of the Federation; the St. Xavier's College Hall for musical entertainments.

### XI. Boarding and Lodging Arrangements.

The Accommodation Committee are making the necessary arrangements for the boarding and lodging of delegates. They will as far as possible be accommodated in the Robert Money School, Proctor Road, Bombay 7. Special transit facilities will be provided for them to attend the Conference and return to the lodgings. Suitable boarding arrangements will be made and the charges for the same will be Rs. 1-8-0 per day for vegetarians and Rs. 2 per day for non-vegetarians, inclusive of the special transit facilities. Within the same rates, separate arrangements will be made for lady delegates. Those desirous of taking advantage of the boarding and lodging arrangements should notify the General Secretary before the 18th December.

There are a good many Restaurants and Hotels catering to all tastes and requirements and charging moderate rates, not far from the venue of the Conference. The General Secretary will be pleased to supply further particulars, if required.

### XII. Climate.

It is rather cold in the mornings during this part of the year. Delegates are, therefore, requested to provide themselves with warm clothing and blankets.

### XIII Instructions to Delegates and Visitors.

Delegates and visitors to the Conference are requested to write to the General Secretary, mentioning the day on which and by what train they will arrive in Bombay so that arrangements can be made to meet them at the Victoria Terminus or the Bombay Central Station. Volunteers will conduct them from the station to the Conference camps.

Delegates will pay their own cooly and conveyance charges. Various types of conveyances, such as, taxis, victorias, buses and trams are available within the city, but those with luggage are advised to take taxis or victorias.

Every delegate will be supplied with a badge and a copy of the detailed programme and instructions on arrival. Admission to all functions will be restricted to those who wear badges. The Individual and Council members of the Federation will have also to register themselves as delegates on payment of the delegation fees.

Delegates intending to attend the Conference are requested to send in their names and fees to the General Secretary, the All India Educational Conference, C/o the Robert Money School, Bombay 7.

### XIV. Programme

Monday, the 26th December, 1938

- |           |   |
|-----------|---|
| 3 p.m.    | Opening of the All India Educational Exhibition (St. Xavier's High School)                              |
| 4-30 p.m. | Demonstration of Physical Activities by Physical Education and Health Section (Elphinstone High School) |

Tuesday, the 27th December, 1938

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|------------------------|---|
| 8 a.m.                 | Annual Meeting of the Council of the All India Federation of Educational Associations for 1939, 1st Session (Open to the Members of the Council only. The Council is also the Subjects Committee of the Conference) (Elphinstone High School) |
|                        | CHAIRMAN P Seshadri, M.A.   |
| 2-30 p.m.              | Photograph of the Members of the Council (St. Xavier's College)   |
| 3 p.m.                 | Opening Session of the Conference<br>Opening of the Conference<br>Election of the President<br>Welcome and Presidential Address Messages and Announcements (St. Xavier's College Hall)  |
| 7 p.m.<br>to<br>9 p.m. | Annual Meeting of the Council of the All India Federation of Educational Associations 2nd Session (Open to Members only) (Elphinstone High School)  |

- 9 p.m. Meeting of the new Executive Committee for 1939.  
(Open to Members only.) (Elphinstone High School.)
- 8 p.m. Musical Entertainments. (St. Xavier's College Hall.)  
Wednesday, the 28th December, 1938.
- 8 a.m. Sectional Meetings (1st shift). (Elphinstone High  
to School.)  
10 a.m.

### (1) University Education Section

Secretary: M.S. Sundaram, M.A., Agra College, Agra.

Local Secretary: J. C. Daruvala, M.A., Professor,  
Khalsa College, Matunga, Bombay.

### (2) Moral and Religious Education Section

Secretary: P. K. De Sarkar, M.A., Headmaster, Bhola-  
nath Academy, Rajshahi (Bengal).

Local Secretary: V. K. Joshi, M.A., S.T.C., Principal,  
C. L. Boys' High School, Dadar.

### (3) Adult Education Section

Secretary: K. S. Vakil, M.Ed., I.E.S., (Retd.), Principal,  
S. M. T. Teachers' College, Kolhapur.

Local Secretary: R. D. Choksi, M.A., Professor, Wilson  
College, Bombay 7.

### (4) Childhood and Home Education Section

Secretary: C. Krishnaswami Rao, Headmaster, Govt.  
High School, Chikmagalur (Mysore State).

Local Secretary: Miss P. Vesavewala, B.A., T.D., M.Ed.,  
The Vachha School, Dadar.

10 a.m.  
to  
12 Noon

### I N T E R V A L

12 Noon  
to  
2 p.m.

Sectional Meetings (2nd shift) (Elphinstone High  
School).

### (1) Secondary Education Section.

Secretary: A. V. Mathew, B.A., B.T., S. M. T. Teachers'  
College, Kolhapur.

Local Secretary: M. P. Shah, B.Sc., LL.B., T.D., Babu  
Pannalal Jain High School, Bombay 3.

**(2) Health and Physical Education Section (1st Session)**

Secretary G F Andrews M A, Ph D, Senior Physical Director, Saidapet, Madras

Local Secretary A N Sane, B.A., B.T., Lecturer, Secondary Training College, Bombay

**(3) Vocational Education Section**

Secretary Laht Mohan Bhattacharya, M A, Cossim bazar Polytechnic Institute, Calcutta

Local Secretary S R Bhuse M A, Principal, S P Hakimji High School, Borda, Dist Thana

**(4) Internationalism and Peace Section**

Secretary P D Gupta, M A, Principal, N R E C College, Khurja

Local Secretary Rev L Raymond, B.A., D.D., St. Sebastian Goan High School, Bombay 2

2 p m

to

3 p m

**INTERVAL**

3 p m

to

5 30 p m

**General Session of the Conference** (President of the Conference in the Chair) Reports of Sections Papers and Discussions Resolutions (St Xavier's High School)

7 p m

**Public Lectures** (St Xavier's High School)

9 p m

(1) **Cinema** (St Xavier's College Hall)

(2) **Joint Meeting of the Editorial and Management Boards of the Journal** (Elphinstone High School)

**Thursday, the 29th December, 1933**

8 a m

to

10 a m

**Section Meetings (1st shift)**

**Joint Session of the Secondary and University Education Sections** (St Xavier's High School)

**President of the Conference in the Chair**

**Secretaries D P Khattry and C A Christie**

10 a m

to

12 Noon

**INTERVAL**

12 Noon,

to

2 p.m

**Section Meetings (2nd shift)** (Elphinstone High School)

**(1) Training of Teachers, Educational Research and Experiment Section.**

Secretary: G. S. Krishnayya, M.A., Ph.D., S.M.T. Teachers' College, Kolhapur.

Local Secretary: R. P. Kar, B.Sc., L.T., T.D., Secondary Training College, Bombay.

**(2) Examination Section.**

Secretary: A. S. Sinha, D. A. V. College, Dchra Dun

Local Secretary: Miss S. Panandikar, M.A., M.Litt. (Cantab.), Secondary Training College, Bombay.

**(3) Primary and Rural Education Section.**

Secretary: Sardar A. T. Mukerjee, M.Sc., M.R.A.S., Head Master, Hindu High School, Nabadwip (Bengal).

Local Secretary: Mrs. Y. Hirlekar, M.A., 151, Hindu Colony, Dadar, Bombay 14.

**(4) Health and Physical Education Section (2nd Session).**

Secretary: G. F. Andrews, M.A., Ph.D., Senior Physical Director of Education, Saidapet, Madras.

Local Secretary: A. N. Sane, B.A., B.T., Secondary Training College, Bombay.

2 p.m.  
to  
3 p.m.

**INTERVAL**

3 p.m.  
to  
5-30 p.m.

**General Session combined with a Special Session on Women's Education:—**Reports of Sections. Papers and Discussions. Resolutions.

President of the Conference in the Chair. (St. Xavier's High School.)

Local Secretary: Mrs. P. F. Nariman, M.A., T.D., Rock View, Raghavji Road, Govalia Tank, Bombay 7.

6-30 p.m.

**Public Education Debate.** (St. Xavier's High School.)

**Friday, the 30th December, 1938**

8 to  
10-30 a.m.

**(1) New Educational Fellowship Meeting.** (St. Xavier's High School.)

Secretary: E. W. Franklin, M.A., Spence Training College, Jubbulpore.

Local Secretary: Krishna Menon, New Era School, Bombay.

**(2) Sections whose proceedings could not be finished.** (Elphinstone High School.)

12 to  
2 30 p.m.

(1) All India Adult Education Conference (St. Xavier's High School)

Secretary H. B. Richardson, Government College, Lahore

Local Secretary

(2) Sections whose proceedings could not be finished (Elphinstone High School)

3 p.m.  
to  
5 30 p.m.

Closing Session of the Conference (President of the Conference in the Chair) Reports of Sections Papers and Discussions Prize giving of the Tennis Tournament and the Exhibition Resolutions of Courtesy (St. Xavier's High School)

Secretaries D. P. Khattri and C. A. Christie

5 30 p.m.

Demonstration of Physical Activities by the Physical Education and Health Section (Elphinstone High School)

Saturday, the 31st December, 1938

Excursions to places of general interest

## ANNOUNCEMENTS

### I. Bhasha Kaumudi—A Study of Hindi through Gujrati.

Once upon a time Sanskrit was the vehicle of thought and expression in India. After its departure Prakrit languages and dialects sprang up and at present there are more than a dozen provincial tongues. All these have got their main structure of Sanskrit and time has brought on the Arabic Persian influences also. This contact has been so great and effective that under the circumstances it is desirable to deal with the situation as it is. For this purpose a general knowledge of the influences and their work on each provincial language taken separately would positively lessen the troubles of studying provincial languages. This has been demonstrated in 'Bhasha Kaumudi' in case of studying Hindi through Gujrati. If grammars of all provincial languages be prepared on common line as suggested in 'Bhasha Kaumudi' the apparent diversities and difficulties would be brought within a limited compass making the study easier and more interesting. *Copies of Bhasha Kaumudi which has been highly spoken of can be had from Mr. P. S. R. Tewari, Sultanpura, near Lehripata P. O., Baroda.*

### II. National Education.

A special number of 'Education' will be soon issued as National Education. It has been edited by a special Editorial Board consisting of Acharya Narendra Deva, M.A., M.L.A., Mrs. Uma Nehru, M.L.A., Mr. K. G. Saiyidain, B.A., B.Ed., and Mr. Kali Das Kapur. Contributions have been invited from distinguished educationists all over the country and it is being issued in a sumptuous form with at least 100 pages of reading matter at the low subscription rate of Re. 1 post free.

This special number should be of paramount topical interest to educationists all over India. Readers are, therefore, invited to register order for it with:

THE HONY. BUSINESS MANAGER, 'EDUCATION',  
Sunderbagh, Lucknow.

### III. The Purposes of Education.

National Education Association and American Association of School Administrators, Educational Policies Commission. *The Purposes of Education in American Democracy*. Washington, D. C.: the Commission, 1938. 157 p. \$50.

Schools are the bulwarks of democracy. Must they amuse children with Latin verbs, theorems and dates in history when the nation is faced with threats of war, high crime rates, broken homes and widespread poverty? The Educational Policies Commission says no.



The report of a two year study by the Commission on *The Purposes of Education in American Democracy* shows how the schools can become a powerful force in correcting social ills and building a democracy. Revisions of the school program are recommended.

Democracy is viewed by the Commission as the established social policy of America, this policy is broken down and analyzed from the standpoint of its meaning for education. Ideals of democracy as "the general welfare," "civil liberties," "the appeal to reason" and "the consent of the governed" are used as the basis for a new pattern of school procedure. Four great purposes of education leading toward these ideals are identified as being essential to the continuance of democracy, each requiring specific emphases in the school program.

The first of these major purposes has to do with personal growth of the individual. Command of the fundamental tools of learning, an inquiring mind, desirable health habits, and suitable leisure time interests are results of the educative process which society desires for every one. These are designated as the *objectives of self realization*.

A second major purpose concerns the problem of getting along with other people. The ability to work and play with others, to enjoy a varied social life both within and outside the home, to appreciate and observe the ideals of family life are important goals of education. These are described as the *objectives of human relationship*.

The third major purpose relates to the earning and spending of an income. Information as to the requirements and opportunities in various types of work, knowledge of the satisfactions of good workmanship and of success in a chosen occupation, and understanding of methods of safeguarding the buyer's interests, are all matters properly within the scope of the school program. These are classified as the *objectives of economic efficiency*.

The fourth major purpose is centered around participation in civic affairs. The development of respect for differences of opinion, understanding of the processes of a democratic society, regard for proper use of the nation's resources and appreciation of the disparities of human circumstance as well as of methods for contributing to the general welfare are responsibilities which the system of public education cannot ignore. These are the *objectives of civic responsibility*.

In advocating these policies for public education the Commission recognizes that a school program alone cannot make good citizens. Other factors such as the quality of the human stock to be educated and the effect of non-school influences are likely to upset the best conceived plans. Consideration of such factors offers a fertile field for planning by the educational profession.

In this third of a series of volumes interpreting the meaning of democracy for education, the Educational Policies Commission undertakes to describe both the ideals of our democratic society and the purposes or "directives" of education which lead toward realization of these goals. Earlier volumes in the series have been devoted to *The Unique Function of Education in American Democracy* and *The Structure and Administration of Education in American Democracy*. The three volumes are attractively illustrated and bound in cloth and boards.

# IV. National Broadcasting Company Playbill

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January 15	School For Scandal	Sheridan	1777
January 22	Mary Stuart	Schiller	1801
January 29	Hernani	Hugo	1830
February 5	Richelieu	Lytton	1839
February 12	The Octoroon	Boucicault	1859
February 19	Redemption	Tolstoi	1875
February 26	The Dool's House	Ibsen	1879
March 5	Patience	Gilbert-Sullivan	1881
March 12	Camille	Dumas Fils	1852
March 19	Cyrano de Bergerac	Rostand	1897
March 28	Peter Pan	Barrie	1904
April 2	The Blue Bird	Maeterlinck	1908
April 9	Justice	Galsworthy	1920
April 16	Back to Methuselah	Shaw	1922
April 23	Oliver Cromwell	Drinkwater	1923
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May 7	Elizabeth the Queen	Anderson	1930

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## ADVERTISERS' ANNOUNCEMENT E I R ITINERARY NO 3

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VOL. II

No. 1

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR:  
D. P. KHATTRY



JANUARY, 1937

ALL-INDIA FEDERATION OF  
EDUCATIONAL ASSOCIATIONS

POST-BOX 52, CAWNPORE

PRICE ANNAS EIGHT

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## Editors' Note

The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments, (d) articles containing statistics and their application to the solution of educational problems, (e) short notices of original works; (f) news of interest to educational workers

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## “INDIAN JOURNAL OF EDUCATION.”

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HH SHRI HWAJI RAO SRINIVAS ALLIAH BAHADUR,  
 MAHARAJA OF GWALIOR.

*Who opened the 12th All India Educational Conference  
 on the 2<sup>nd</sup> December, 1936*

# Indian Journal of Education

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Vol. II { JANUARY 1937 { No. 1

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INAUGURAL ADDRESS OF THE TWELFTH ALL-INDIA  
EDUCATIONAL CONFERENCE, GWALIOR,  
DECEMBER 27, 1936

BY

HIS HIGHNESS MAHARAJA GEORGE JIVAJIRAO SCINDHIA.

LADIES AND GENTLEMEN,

It gives me the greatest pleasure to see this evening learned representatives devoted to the noble cause of education, hailing from all parts of India, to grace this happy capital of my State with their inspiring presence. I am thankful to the Federation for conferring upon me the honour of addressing you at the very beginning of your Conference. I am aware of the fact that it is chiefly my position which is responsible for bringing to me this honour. I cannot claim to have studied the intricate problems arising out of constant effort for the development of young minds, which must be exercising your intellectual powers every day of your professional life. But this much I can say with certainty—I am fully conscious of the vital importance of scientific educational activity in the life of an ambitious and progressive State. This consciousness coupled with the feeling of pride and joy in having this opportunity to welcome the leaders of education to my State—a feeling which will doubtlessly be shared by all educated people of my State, but in which, I am sure, few will surpass me—this is what made me come forward with enthusiasm to accept your invitation.

For a place which has the good fortune to be selected as the meeting-place of such a noble gathering cannot fail to profit from personal contact with its learned representatives. A great river cannot flow through a country and leave barren the land on its banks, unless that land is made of granite rock and we hope you

will not find Gwalior so impervious as that! In the invitation to this Conference I see an encouraging sign of activity in the Education Department of my State, indicating as it does, that it is alive to the advantages to be gained from exchanging experiences and from coming in touch with fresh and living ideas. Though modern means of communication have to a great extent diminished distances in time and space, nothing can be an adequate substitute for actual personal contact with educationists. And that is one of the ways in which a Conference like this is of special benefit to the persons belonging to the locality. For this reason those concerned with education in Gwalior will ever be grateful to the Federation for the innumerable advantages they will secure from this Conference.

That is what we hope to gain from your presence here this week. When I begin to think of what we can give you in return, I must admit the answer is not so encouraging. You would be right in expecting something worth noting in an educational system working independently in an individual State. It is true we could have done much on our own in those spheres of educational activity not directly interrelated with vaster organisations outside the State. Branches of higher education which come under the direct supervision of the University must necessarily depend for their progress chiefly on the movement initiated at the top. But there are many other sections that need not wait upon outside initiative. Primary education, Adult education, Technical education, Vocational training, Women's education are a few that come to one's mind. These could have been developed by our local educational authorities on their own initiative. My revered father, with a foresight that ever kept his ideas in advance of his times, did actually provide the framework for most of these branches of education, though unfortunately he did not live long enough to see the details filled in. During the time that has passed since his lamented death, you would naturally expect a large amount of practical progress to have been made in this sphere. But though the framework is still there, embracing within it institutions whose activities extend from provision for the education of the aristocracy to meeting the requirements of small Muafidars, and from conducting girls' schools to the management of technical institutions, we have to admit with regret we have done nothing appreciable to develop that framework into a graceful living home. I hope you will examine with interest what we have to show you, and I have no doubt that our educational authorities will get the advantage to be derived from your expert advice.

Well, in one sense at least we can lay claim to appreciable progress. During the last twelve years our educational budget gradually increased to nearly double its original size. But there is not a proportional increase in the output. The same question may be facing you in your own provinces and you must all be aware of the fact that results alone will encourage either the Government or the people to spend greater amounts on education, which by its nature demands immediate expenditure for results which will come out in an appreciable form only at a distant future. I am sure your advice will be exceedingly valuable to our authorities in their efforts to get the best out of every penny spent.

I have specially referred to these two problems because they take their peculiar colour from different localities. And I think it is the desire to study these local aspects that is at the basis of the custom of selecting a different place for the Conference every year.

But there are certain problems of a general nature facing all of us with equal urgency. What is to be done about higher education, is one of these problems and it is at present causing concern in almost every University. One drawback I notice about higher education is that it makes almost impossible for the young graduate to make a good start in life. He finds it very difficult to shake off the rosy picture of an honourable position with a comfortable income that greeted graduates of long ago and is now only a delusion and a snare. He finds it a bitter experience to start on the lowest rung of the ladder and to be beaten by his more ambitious but less impatient and less educated competitors. The problem of how to cure my own and the coming generations of this mentality is one which demands immediate attention.

There is no doubt that the blame for this mentality cannot be wholly laid at the door of the young man who suffers as the result of it. Our educational system must be held responsible for the larger share of it. Again, it must be stated that there is nothing intrinsically wrong with the system itself. The present system was devised with a view to satisfying a definite demand, and to some extent it has admirably served its purpose. The difficulty came when the system continued with the same rigidity even after that demand was more than satisfied and failed to adapt itself to the changed circumstances. Take the example of the graduate I have just mentioned. He has spent about sixteen years of his life—and those the most important years, in a constant effort to prove himself fit for promotion in a system

which clearly aimed at higher government services or the learned professions. Before getting out of that system, he dwelt in the clouds with poets worshipping things of beauty or building in his dreams large laboratories, where he could discover the secrets of nature. I may say it speaks well for the intrinsic balance of character of the man, inherited from a long line of ancestors,—that, the rude shock of being told that he is not wanted for a job which may ensure a decent living, does not demoralise him and make him an enemy of the society.

But you will agree with me, we cannot afford to allow this thing to go on for ever. It is high time now to revise our system and to make it more suited to Indian life and conditions, instead of a second rate copy of the West. I cannot presume to speak on the technical details of bringing about this result. I can only lay before you the results we want, and that is all a non-educationist can do. It is not very difficult by means of statistics to foresee how many persons can be absorbed in the higher government services, or as pleaders, doctors or professors. If there is a rush on the paths leading to the professions, it is the duty of the elders to institute a selective process at an early stage, to avoid the pitiable sight of failures and ruined lives. For the unemployed graduate does not suffer alone. His failure involves the waste of money and energy spent on him during all the time he was being led to his hopeless destination. The stages in the course of education must be so arranged that for those who have nothing to gain by following them to the end it must be possible to start life at an early stage with some definite educational achievement to their credit.

A problem that does not lie strictly within the province of educational experts, but which is nonetheless a problem for the educationists, is the one of the depressing mass of illiteracy. This is the most serious obstacle that stands in the way of every effort at progress, as it makes it impossible for you to attract the attention of the masses without whom you cannot take a single step forward. The greatest effort is necessary to remove this dead weight of mass illiteracy. Government alone cannot hope to do this. A rapid increase in the number of primary schools may do something to increase literacy in the generation that is just making its appearance. But even there the present economic conditions in India, with the low capacity of the people to pay taxes, tie the hands of government in the matter of undertaking the colossal expenditure necessary for merely extending the present network of educational institutions. A method has to be devised by which every pie that is spent at present will give

us much more output and by which simple literacy, though not education, can be spread among the adults with the greatest rapidity.

Then there is the problem how to improve the religious and ethical value of education. Most of you belong to a generation older than mine, and for this reason you cannot feel what is going on in the minds of the present-day students, though you may know it by observation. My own experience in this respect is fresh and may, therefore, be laid before you for what it is worth. In ancient times religious and ethical ideas formed the most important part of the educational course, whether of the student of the Vedas who learnt them from Sanskrit books or of the apprentice to the artisan who absorbed them from his master and from the craft to which he belonged. This religious and moral background enabled the young man to face the vicissitudes of life with courage and calm. In the present system, our educational institutions refuse to share any responsibility for the moral and spiritual progress of the student. They equip him only with book learning in which he is often very little interested, leaving a void in his mental make-up, making him a spineless and pitiable creature if his book learning fails to win him success in life. I know in the heterogeneous creeds and communities of India, there are great difficulties in the way of devising a system of religious training that would be appreciated by all. But this difficulty should not prove insuperable in the face of concentrated effort of keen and learned educationists working with a will to overcome it.

The selection of the proper persons to work as teachers is also in my view a problem in itself. Other departments can afford to staff their services with persons in whom they may find nothing more than average health and intelligence, but the requirements of a teacher are much more varied and far more important. It does not matter if he is not exceptionally intelligent, what matters most is that he should have a keen sense of responsibility and unshakable strength of character. But if we examine the actual conditions we find a spectacle quite contrary to this expectation. Those who are rejected by other departments find their way straight into the education department especially in the primary school. I do not know what your experience is, but I fail to see why such a vital drawback should prove so difficult to remove. If you see some of the teachers in primary schools you will not be able to suspect that they are teachers unless you are told so. On the other hand, you cannot expect a high standard of life or honour in a person whom you ask to live on 10 or 12

rupees a month. I very much doubt if the cultural distance that separates professors from primary school teachers is really proportionate to the difference in their salaries. In any case, with all theories and discussions, it is the personality and ability of the teacher that will ultimately decide the success or failure of an educational scheme, and one of the most crying needs of the time, in my opinion, is how to secure the best men for our schools and how to train enough of them for the all important work they have to do.

I have briefly stated here the questions that came before my mind on observing the conditions in my State. You have come here with your experience of different parts of India, and I hope you will suggest solutions and give advice to our educational authorities in the light of your experience. You may consider it selfish on my part to invite this august Conference to study the needs of my State, but I do not hesitate to say that I place the interests of the people of my State above everything else. I am sure if every place where the session of this Conference is held secures the benefits which I expect Gwalior to receive, it will not be long before the whole of India comes in for a share of these blessings. Let every individual section of the Indian nation strive for its own uplift and the nation will automatically advance in its path of progress. Otherwise we may waste our energies in finding out and criticising the faults of others and suggesting means for their removal, without having to share the responsibility of applying them in practice, all the while leaving our own problems to the sweet will of nature.

Every problem must first be dealt with locally in all its details, and this can best be done at its roots, that is, the place where the problem first makes its appearance. Only then can the representatives of different localities usefully meet one another to hold discussion and exchange views with authority and confidence, only then will the purpose of conferences like the present one be adequately served. I believe the constitution of the Federation makes ample provision for this. The real work of the Conference has to be carried on all the year round through the centralising and disseminating medium of the Federation, the Conference only meeting to sum up the activities and efforts of its constituents during the year, so as to organise them and make them a part of the experience of every one of them.

As I have already said, I cannot presume to enter into the details of your taxing though tempting task. In your presence I can speak only as an interested spectator of your noble work,

watching with eagerness and reverence for something you will give me for application in practice.

Ladies and Gentlemen, giving satisfaction to one's guests is one of the purest pleasures one can experience; and the joy becomes more intense when the guests are learned Pandits like yourselves whom I have the honour to welcome to my State. I know we have not been able to provide you with all the comforts which I feel it is our duty to do. But a Hindu regards his *Atithi* ( अतिथि ) as God in disguise, and welcomes him with what he has to place at his service. I hope you will look to the feeling with which the hospitality is offered and forgive us for the inconvenience we were unable to avoid.

Thanking you for the patient hearing, I now perform the happy duty of declaring this Conference open.



PRESIDENTIAL ADDRESS OF THE TWELFTH ALL-INDIA  
EDUCATIONAL CONFERENCE, GWALIOR,  
DECEMBER 27, 1936

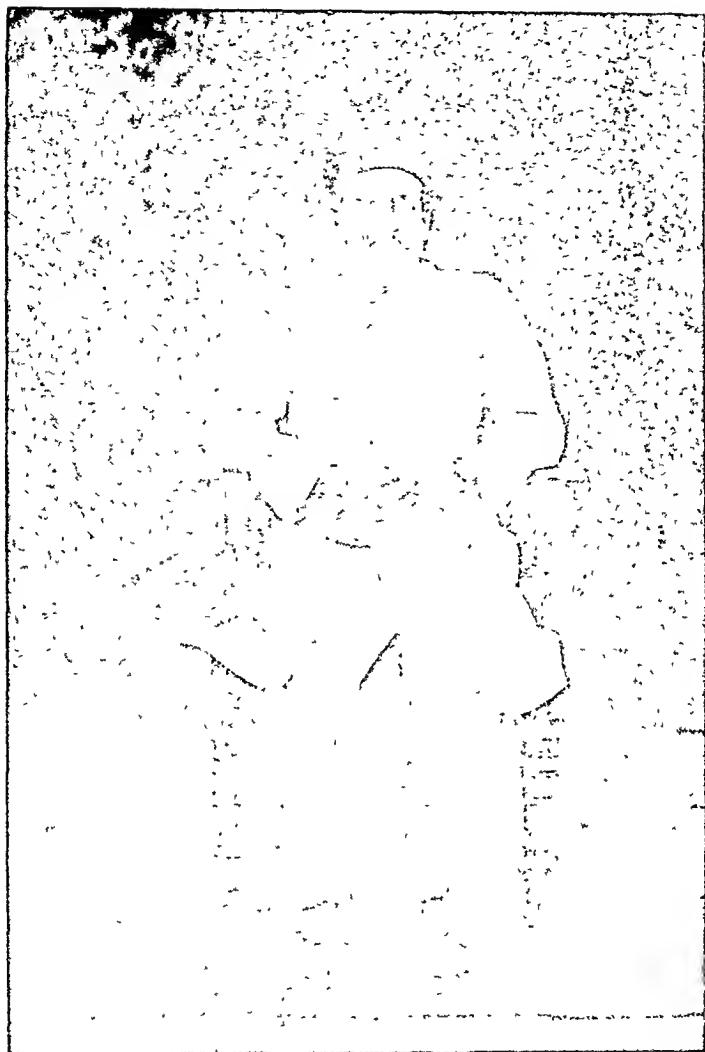
BY

PANDIT IQBAL NARAIN GURTU, M A , LL B ,  
*Vice Chancellor of the Allahabad University*

LADIES AND GENTLEMEN,

I am deeply sensible of the great honour you have done me in asking me to preside over the deliberations of the Twelfth Session of the All India Educational Conference. Such gatherings offer a splendid opportunity to all those who are interested in education to exchange views and to clarify ideas, and to bring about by joint and organised efforts a more rapid educational advance in our country. The problems that have to be tackled are both pressing and complex and our future progress essentially depends upon their right solution. No one can pretend to be able fully to present the different problems or to offer satisfactory solutions for all or even most of them. I can, therefore, try to place before you only a few important aspects of the problem.

It was full one hundred years ago, almost to a day, that after a long drawn controversy, Lord Bentinck's Government concluded in favour of the promotion of European literature and science among the Indians. The experiment of Western education, as it has actually worked out during the course of a century, can only be said to have been a mixture of success and failure. It is even now extremely difficult correctly to appraise the sum total of gains and losses which is differently estimated from different points of view. Certain definite tendencies can however be unmistakably recognised. Western education has, in common with other countries in the world, been of considerable help in awakening the people of this country to a new life and in gradually releasing modern India from the bondage of orthodoxy and tradition, of priest craft and superstition. The freedom of intellect, individual and social liberty, a keener sense of national self respect and growing democratic aspirations are our main acquisitions which may be placed on the credit side of our national ledger. But there is also the debit side of the ledger



PANDIT IQBAL NARAIN GURTU, M.A., LL.B.,  
*Vice-Chancellor of the Allahabad University.*

The heavy impact of the vigorous and dynamic civilisation of the west, with a country which had become hopelessly static in the closing decades of the 18th century, naturally produced a tremendous collision. The rapidity of changes imported from the outside on an India ill-prepared to receive them, and its contact with an assertive and aggressive materialistic civilisation, have considerably destroyed among the "educated" classes the capacity for a correct appreciation of Indian culture, the study of which has been almost totally ignored in the scheme of education hitherto followed. The modern teacher certainly knows very much more about western culture, and speaks faultlessly in its accents, but he has almost completely lost the "connective tissue of civilisation" in the long history of his country's past with its pervasive spiritual influence. The youth of the country have not been encouraged to feel proud of their national heritage, nor have they been deliberately helped to carry on a systematic study of Indian ideals and institutions, with a view to finding out what is really valuable in them. This has naturally resulted in an extraordinary conflict of values, and our best minds are oftener than not, at a loss to know where to turn for a principle of action and from where to find their true inspiration for the future.

Our country is no doubt rapidly assimilating the new ideas of the west but this kind of assimilation, which is but another name for imitation, cannot develop, as it has not indeed, developed the constructive capacity and the creative genius of our people. Only an education with a definite constructive aim appealing to the heart of the community can become effective and creative. In the case of India the inhibitory pressure of alien standards has not allowed a sufficiently free scope for the expression of its deeper life. Society, it is truly said, is not a manufacture but a growth, and national ideals cannot be bodily transferred from one people to another like household goods. Each nation has its own characteristics which must not only be respected but used in its education. We shall of course have to utilise to the best advantage, the contributions made towards human progress by the leading civilisations of the world to-day, but it will have to be a process of judicious selection and adaptation of such elements of foreign civilisation as would meet the requirements of our country and would be in the interest not of any one particular class but of the entire community. American civilisation has had its source in European civilisation, but America has utilised that heritage in producing quite a new and distinctive culture. Japan has done the same and before our very eyes has developed a type of culture specifically its own.

What is the position in India to day as it is reflected in our educational system? From its very inception, it has lacked the initiative to organise public education wholesale and to broadbase it on wide social foundations. The needs of the masses and their speedy intellectual emancipation were not, for quite a long time, taken into account. The necessary result of a policy characterised by such a narrow vision has been, that primary and vocational instruction which is altogether indispensable for increasing general prosperity and culture and for giving sufficient strength to public life and opinion, has been sadly neglected. The very low position given to the mother tongue in the scheme of education and the avoidance of the use of the Indian languages as the media of instruction in our schools are anomalies which would strike any foreign visitor who would approach the question without any preconceived bias, but which force of habit makes us quietly submit to and tolerate. It is not, therefore, surprising that a system of education so essentially defective in its outlook has created an enormous gulf between the educated classes and the masses, who are deeply plunged in illiteracy and are altogether traditionalists in their ways, and who neither show a proper understanding of the needs of the country nor even of their own individual and domestic well being.

It is, however fortunate that we are beginning to see a little more clearly the dark spots in the educational system in vogue, and the over pressing sense of our backwardness is now urging us to give more serious thought to the problem of educational reorganisation. All over the civilised world we notice a changed attitude towards the whole meaning of education, and we find that there is a decidedly scientific approach to educational problems. The feeling is thus growing strong every day that the whole educational system in our country has to be permeated with a *new spirit*.

The nature of the child, his growth and his potentialities are now matters of very close study and observation. The child is no longer studied exclusively as an individual but as a member of a social group. Education is not looked upon as being merely a preparation for adult life but is being more and more made to minister to the child's growth—physical, mental, emotional and spiritual. In India we are yet far behind other advanced countries in our notions about the proper bringing up of the child at home. His training at school, in his early years, is also being considerably neglected. To mention only one among many serious drawbacks, is the lack of sufficient and suitable literature for our children in the different languages of the country. There

is plenty of stuff that is poured into the market and is sent to the various text-book committees for approval every year with misleading titles like "New Arithmetic," "Modern Geography" and "New Methods" in all branches and conceivable subjects of the school curricula. But really good story books or children's magazines or historical and geographical or science readers, well illustrated in attractive colours and inviting in their get-up, and written in the mother tongue in a style suitable for children of varying ages and mental growth, are unfortunately very rare. One can get a large variety of such literature in English at any respectable bookshop at moderate and reasonable prices, but it is not of much use to Indian children because it is written in a foreign tongue. By the time they gain sufficient knowledge of English they mentally outgrow the stage for which such books are really meant. Then again, the subject matter, the presentment of social life, and in fact the entire setting and background of their theme is so different and unfamiliar to the Indian child. The result is that our children are mentally and emotionally starved, because they are deprived of an opportunity of satisfying their natural curiosity and desire for gaining knowledge of the world in which they are born and of the surroundings in which they are placed. Thus our children gradually lose all that keenness of an inborn urge, which—it is now an undisputed educational axiom—must be stimulated and satisfied. They have only to fall back upon the monotony and routine of class-room instruction, which in addition to being dull and mechanical, is so unreal and unconnected with surrounding life. No wonder then that our boys and girls are usually extremely deficient in the general knowledge of the world around them and are more bookish than practical. I would invite the attention of the Federation of Educational Associations to this pressing educational need. Why should not some of our teachers who may be gifted with the necessary imagination and insight into the psychology of children, and who could write in a simple and entertaining style, help in the production of such literature for children? Why should not some of our resourceful and enterprising publishers and printers make a bold experiment in this field? Why should not the different Provincial Governments encourage the production of such useful literature by offering handsome prizes and subsidies to authors whose works may be approved?

Dwelling on the necessity of encouraging the desire among our boys and girls to acquire more of general knowledge related to life, I would add that it is very essential that our teachers

should themselves be sufficiently equipped with that kind of knowledge. If in our normal schools and training colleges greater stress were laid on the future teachers being more broadly educated in other directions besides the usual training in "methods" and in the special subjects they may have to teach it will undoubtedly lead to a much desired improvement and help in widening the mental horizon of both pupils and teachers. I happened lately to visit a school recently established in Northern India where I found boys in the pre Matriculation class answering a question paper dealing with current topics and with things of general interest outside their textbooks. This plan might well be adopted by other schools. I have often felt that the chief reason why our children always lean on their teachers, and confine themselves to memorising textbooks, and attach such undue importance to examinations and results, and do so little of general reading at home or in the library, is that their natural curiosity to know about the world and their surroundings is killed out in their early life. It is this mental atrophy and abysmal ignorance of things of human interest which is in a large measure responsible for their lack of initiative and enterprise, and which generally keeps them away from taking to occupational interests or to any new pursuits in life, which are in any way beside the beaten track of "service."

The point that I wish to emphasise is that we have first to build certain intellectual traditions before we can expect to bring about certain desired results. We are apt to think in a rather loose manner that the prosperity of Europe and America to day, is due to the scientific achievements of the west, and we argue to ourselves that if we could adopt more of scientific and technical education we could also at once produce the same results. The important fact that we often overlook is that it is the western mind that has brought about the present scientific and technical developments and not modern science which has by some magic dropped from the heavens and created modern Europe and America. Europe had to go through a process of special mental training during the preceding periods from the 15th century onwards, before it was able to make important scientific discoveries and to utilise them in the most practical manner. Thanks to our past history and intellectual advance and culture, it is not necessary for us to go through a rigid training lasting for several centuries before we can hope to be able to achieve similar results. But a certain period of time for a mental training of that character is undoubtedly necessary, and we must bend our energies to that, in a more intensified form

than, I am afraid, we have done so far. It is truly said that there is but one revolution that avails, and that is to revolutionise people's minds.

The same elements of weakness which are so marked in the education of our children in their early life are noticed even more prominently in our secondary education. We may hold different opinions regarding the remedies suggested for its improvement, but there is remarkable unanimity on the point that its reorganisation has become very necessary. Our present system of secondary education is much too uniform, narrow and inelastic. The school horizon is very limited. There is considerable lack of suitable interests and boys have hardly any hobbies. All this goes to make school life extremely dull. The instruction given does not provide for the needs of pupils of different aptitudes, nor is it closely related to living interests. It is not so planned as to make easy after the completion of a particular stage the transition of a student into a type of institution, which would provide instruction on lines best suited to his particular gifts and to his needs. The education imparted is of a predominantly literary character and a secondary school serves as a corridor passage to the University for all and sundry. High School education is still very much looked upon as a preparatory stage rather than the end of a definite stage for a large number of students.

The general features of the defects in our present system of secondary education in India are more or less the same as were found, and to a certain extent still exist, in other countries of the world—Europe not excluded. Prior to the Act of 1902, secondary schools in England were run very much on the lines of Grammar Schools of the 19th century, and had for the most part an academic curriculum which was chiefly meant for the requirements of the Universities. But they have been now largely improved and re-organised. During the last 25 or 30 years, some efforts have also been made in India to improve secondary education and to make that stage complete in itself. It was with this object that the schemes of the "School Final" and the "School Leaving certificate" examinations were introduced in certain provinces. With the same object in view, the Sadler Commission recommended reforms in the "Intermediate" or pre-University stage which has in fact to be taken as the finishing stage of secondary education. All these schemes, it must be frankly admitted, have failed to achieve the main object. Opinion is now gathering round the view that the remedies, so far tried, have been confined to the higher rungs of the ladder,

where they become in fact much too late to be of any effective use in changing the mental habits and outlook of young men, who by that time get into the old rut. It is now being recognised that the age of adolescence between 11 and 15 is a time of considerable psychological changes which necessitate the adoption of different educational methods. The Hadow Committee in its report published in England in 1926 has very clearly enunciated the main principles. At the age of 11 or 12," they say, "children are waking to various new interests suggested by the world around them. Many of them are already beginning to think of their future occupations and anxious to be doing something, which seems to have an obvious connection with them. Many more, without having any clear idea of what they will do when they leave school, feel ill at ease in an atmosphere of books and lessons, and are eager to turn to some form of practical and constructive work, in which they will not merely be learners but doers, and in a small way creators. If education is to retain its hold upon children at this critical stage of their development, it must use, and not reject, this natural and healthy impulse. It must recognise that there are many minds, and by no means minds of an inferior order for which the most powerful stimulus to development, is some form of practical or constructive activity. The work of the school must not seem, as sometimes, perhaps, it still does, the antithesis of "real life," but the complement of it."

For boys who are likely to finish their education at the age of 15 or 16 in order to earn, they recommend the establishment of a separate type of school where, for the present, there may be a provision for a four years post primary course, with a "realistic" or "practical" bias in the last two years of instruction along with general education. The distinction that the Committee has drawn between the two kinds of education is an important one. They say "We propose to use the term "practical bias" to denote the emphasis laid in the school curriculum on practical aspects of certain subjects without involving work in the technicalities of any one specific trade or occupation. The aim which we suggest is that while no pupil in the modern school with a taste for industry, commerce or agriculture should be educated with a view to any specific calling, he should nonetheless receive such a training, as will make it easy for him after leaving the school, to adapt himself to any occupation in the group of occupations to which the bias is related."

The principles laid down by the Hadow Committee and the recommendations made by it have been almost universally



accepted in England and new schools of the type mentioned above are being successfully established and worked in different parts of the country. It is expected that when the scheme is fully completed, it will bring about a marked advance in the system of education in England. *What is to be noted is that the Central Schools recommended by this Committee are being established in addition to the existing Senior Schools and Secondary Schools which are not to be abolished.*

But, in my own Province we have reasons to fear that it is being suggested in certain quarters that schools from Class V to Class VIII, with a four years "secondary" course, should to a large extent be substituted in place of the High Schools giving instruction up to Class X. If there be any truth in these rumours then the manner in which the so-called "re-organisation" is to be worked out, will very likely bring about more confusion than progress and prove a powerful lever for public "destruction" than for advancing public "instruction." There is just a possibility of similar schemes being hastily launched in other parts of the country. For the last 75 years or more we find that in all the Provinces of India, there have been two well-recognised grades, covering altogether a period of 4 years, after the completion of what is called the "middle" stage of secondary education and before the commencement of the regular degree course of a University. Thousands of High Schools and hundreds of Colleges in India, have by this time been established on the basis of this gradation and are being financially supported by the public and helped by Provincial Governments with grants-in-aid. But, judging from the views repeatedly expressed of late in the annual and quinquennial reviews of education in India, we find indications of a new love for a system of triennial in place of biennial examinations having grown in responsible circles. It seems everything is to be sacrificed in the future to that one particular idea. The proposal seems to be to reduce this period of 4 years to 3, to transfer the last year to the Universities and to abolish the High School examination and have only one examination 3 years after the middle stage. The abolition of one public examination out of two, and the prospects of holding an examination after three years instead of two, may at first sight look very attractive and convenient, but the cost that will have to be paid for this innovation, will indeed be very heavy. Such High Schools as will not have sufficient financial resources and accommodation to enable them to teach up to the Intermediate standard, will have no option left but to be contented with their own reduction to the level of only "middle" schools. In this manner the provision

for instruction in the higher stages of secondary education beyond the "middle" grade will become substantially limited and restricted. It will not be a matter of surprise, if out of more than 200 High Schools for boys in our Province, nearly  $\frac{2}{3}$  may have to drop classes IX and X and may practically be reduced to what are styled Middle Schools. It is just possible that only  $\frac{1}{3}$  of the present number of High Schools may find themselves in a position to provide for the next higher grade of three years and to enable only about 60 per cent of the present number of boys aged 15 years to proceed to the higher secondary grade. If all this is likely to be the result of the so called scheme of re-organisation, what is going to happen to the remaining 40 per cent of boys of the age of 15. For aught we know, we may be told by way of consolation that this large residue could be absorbed by the Police and the Army or become teachers in vernacular schools. India must indeed be a country of giants both physical and intellectual where boys at the age of 15 would do for the defence of the country or the maintenance of law and order, or for the spread of the beneficent light of knowledge.

It is refreshing to find that the approach of the Hadow Committee is so markedly different from the manner in which the problem is being tackled in our country. Instead of suggesting that the "Secondary Schools" in England should be scrapped and turned into Central Schools, the Committee say—"we regard the growth of Secondary Schools since the Act of 1902 as one of the finest signs of our educational progress, that we recognise that it has encouraged and fostered the development of our Universities, that we believe it has liberated a fund of latent capacity and that we hope that it will continue at an even greater rate and on an even greater scale." They have also made it clear that the Central Schools which they have recommended, do not by any means dispense with the necessity of providing for technical and vocational education. They believe that "there are diversities of gifts, and for that reason there must be diversity of educational provision." According to them "what is needed is experiment and elasticity." I am afraid, with us here, it is the substitution of one mould for another, and it is that which goes by the name of re organisation.

In England there is ample provision for juveniles and adults who are above elementary school age in institutions other than secondary schools. There are certain groups of institutions which are occupied before employment is taken up, while there are also principles of institutions, which are for the most part meant for those who are already in employment. In the first

group are the junior technical schools which are very popular and have met the approval of employers as well as the educationists. There are also junior "Commercial" Schools, "Trade Schools" and "Junior Arts Schools," etc. In the second group meant for those who are already employed are the "Continuation Schools" which are mostly part time day or evening schools, which in spite of "leakage" and "waste" and the overstrain they cause are attended by nearly three lacs of part-time students between 16 and 21 years of age. Some of these part-time technical schools in fact provide for senior and advanced courses. In addition to this, a scheme of compulsory system of day continuation schools is also being tried, though it has not been quite a success so far. It is this great net work of institutions other than secondary schools and of continuation schools that absorb a very large number of pupils before and after their period of employment between the ages of 13 and 16 and of 16 and 21 respectively. It is indeed an organisation of schools of this character which has on the one hand made it possible to save boys from lapsing into illiteracy after they leave the elementary schools, and on the other, to avoid over-crowding in the higher classes of ordinary secondary schools or in the universities. It is not the policy of elimination, restriction and contraction but a wise policy of providing a sufficiently wide range of educational opportunity for all, according to their aptitudes, needs and circumstances, which has added strength and efficiency to the system of secondary and higher education in England.

While giving an account of the progress achieved during the last 25 years, the Board of Education in England have recently stated in their report as follows: "There is no doubt that a more conscious recognition of the claims of the individual and a greater emphasis on the development of each child according to his bent and capacity, have inspired the major developments during the period under review." One of the surest tests of the efficiency of a state is the manner and extent of its interest in education. While it is expected to be moved by the most progressive ideas in education, it is also expected to carry with it enthusiastic support of public opinion. During the last quarter of a century, England had to go through terrible experiences and setbacks on account of the Great War and the consequent financial and economic troubles, and yet the total expenditure from the Treasury on education has increased threefold, and quite a large number of new schools have been added. The percentage of schools teaching handicrafts and domestic subjects, gardening, etc., to children of over 11 has risen considerably. To avoid any

misunderstanding regarding the position of those who advocate the establishment of a much larger number of vocational schools, it is necessary to point out that it is not suggested that such schools should be indiscriminately started here, regardless of the needs of particular areas or of the fact as to how far the youths trained in such schools could be absorbed in trade and industries, as they stand at a given time. Sufficient caution will have of course to be exercised, so that there may not be any very large margin of unsatisfied demand.

It is time we were a little more clear in our minds about the issues involved. A solution of unemployment which could give any kind of a more or less permanent relief, can only be expected when a satisfactory adjustment of the political, financial, commercial and economic policy of the State were made, or in other words by means of proper economic planning. Technical and vocational education can, however, materially contribute towards raising the efficiency of the people in producing wealth and help them to an appreciable extent in earning their livelihood. "Realistic" education with a "practical bias" could help in the development of the latent capacities of the pupils and of their intelligence. It would make them much more practical minded and develop the great qualities of initiative and enterprise, which are so indispensable for individual well being and for national progress. Again, it is not the removal or retention of certain classes in our secondary schools or any drastic changes in the curriculum which will work magic. What is needed above all is the adoption of proper and scientific methods of teaching which would stimulate the living interests of the pupils. It is more, indeed, the process of 'learning' on the part of the pupils than so much of 'teaching,' on the part of teachers that has to be emphasised in our secondary schools.

It has become almost a fashion these days to hold the Universities responsible for unemployment. In the official publication "Education in India, 1933-34," the writer while reviewing the position with regard to unemployment among the educated classes, proceeds to state "An analysis of the figures of failures at the Matriculation, Intermediate and Degree Examinations of most of the Universities, will show how much of the unfit material in the Universities is confined to students who come from a class of community, who can ill afford time and money on high academic education. But more tragic than the financial loss is the actual waste of material in so far as the student who eventually achieves his degree, finds it quite impossible to obtain clerical or professional employment, and is

utterly unwilling and also utterly unfit to go back to the hereditary family occupation. In this way the Universities in India are year by year producing more unemployable persons. While nobody would want to deny the benefits of higher education to any person competent to make a profitable use of it, the hard facts are that it is no kindness either to the individual or to the community to turn young men, who are potentially wage-earners as artisans and hereditary workers into a band of ill-equipped graduates." One may well ask "Where is there in our educational system in India any provision worth the name for the proper training of these potential wage-earners as artisans and hereditary workers?" If there is none, why should the blame be laid at the door of the Universities, if this class flocks to them after passing through the only channel, so far provided, of secondary schools which suffer from the inhibition of a remarkably inelastic type of education.

Dr. Kotschnig in his book "*Planless Education*" has shown how the Universities all over the world are overcrowded to-day and how the unemployment of their graduates is increasing everywhere. Says he, "the secondary schools in most countries are ill-adapted to the degree of technological education characterising the society, within which they exist and this is the main cause of overcrowding of the institutions of higher learning." India has throughout the ages been an agricultural country, but it had also its own flourishing indigenous industries which have decayed, and any remnants that may be left here and there are fast decaying. Its requirements for a modern type of industrial development and organisation, which would make up for that loss are growing and pressing, but for various reasons, have not been or could not be met. I do not propose to dwell here on these causes some of which touch really fundamental issues—social, political, commercial and financial. The magnitude of the problem can best be realised when we find that other countries of the world which are self-governing and are not suffering from the serious disabilities from which we suffer to-day, and whose educational system is far better organised and planned to meet their own requirements, have a similar problem of unemployment to face. Under the circumstances, it is not much use merely cursing higher education and the Universities in India. It only diverts our attention from the fundamental issues and affords an escape from the anguish of the deeper searchings of the heart.

It is however necessary to point out, that it is not claimed that everything is well with the Universities or that there is not

much leeway to make up before they could reach the level of the modern and leading Universities of Europe and America. Nor is it disputed that it is necessary to increase their efficiency and utility with a view to give a somewhat more practical training to young men for the varied interests of life. Our centres of learning and culture have to be adapted to the conditions of a new social order, but we must at the same time recognise that their development is among the vital interests of a poor country like India. But unfortunately, the cry for reducing expenditure over higher education and for restricting the number in the Universities has of late been somewhat gaining in volume and strength. The easiest method suggested in certain, if not in all, quarters is that tuition fees must be raised and people who want to indulge in the luxury of higher education must be made to pay for it. In a world of growing competition every nation has for its very existence—social, political and economic—to raise the standard of knowledge in every possible manner and to develop the capacity of organisation and leadership. If, however, there are still some people in India to day who consider higher education a mere luxury, they only show a lamentable lack of imagination, of self respect and sympathy. In no part of the civilised world to day the suggestion of raising fees merely with the object of restricting enrolment in the Universities is acted upon. The reason why it is not done, is that it tends to confine higher education only to those who enjoy the advantage of wealth.

Recent instances of certain countries in Europe having imposed restriction in admission to the Universities, are being quoted in justification of the argument in favour of the adoption of a similar policy in India, and it is, therefore, very necessary to examine the question a little more closely. In the case of institutions providing a specialised kind of training, the system of restriction of admission by means of a competitive examination is a well recognised practice both in India as in other countries. Then, again, in admissions to institutions giving occupational or professional training like Teaching, Engineering, Mining and Medicine, or to scientific and research institutes, or to University laboratories, where the equipment or accommodation is of a limited character, restrictions have to be imposed and are imposed in India also. It is, however, quite a different proposition to lay a general embargo on admissions to the different faculties of our Universities, without affording any other kind of facilities and opportunities for the absorption of those youths who may be rejected. We are not unaware of the fact that, by a law intro-

duced in 1933, Germany has imposed a general restriction on enrolment in all the faculties of the Universities and the number of students has been in a short period substantially reduced. Germany has introduced some novel devices and laid down certain new criteria for admission. One is compulsory service for 4 months in a work camp for both men and women before entering the University. No serious objection could be raised to it, if it were found practicable in India, but it can never be an effective safeguard against overcrowding either in Germany or in India, when once people after a few years get accustomed to it. But the criteria of selection prescribed in Germany apart from intellectual fitness are (1) a test of character and (2) an evaluation of national trustworthiness. The first is much too vague and indefinite as it is so difficult to measure character; while the second is open to serious objection as being potentially mischievous, because it is sure to introduce political considerations and place the younger generation and its future interests at the mercy of the whims of any political party which may for the moment be in power. The ruthlessness of the measures recently adopted by Germany has not been so keenly felt because so many employments are opened out to young men there, by the rapid militarisation going on in the country. Germany's military activities are absorbing a very large number of students who are refused admission into the Universities, but what about the prospects of any such kind of relief here?

While reviewing the various methods adopted for the rationalisation of the professional services and their better distribution, Dr. Kotschnig seriously doubts whether "these measures even in those countries where they are best developed and most fully applied, have led to any substantial decrease in the unemployment figures of intellectual workers." He further goes on to say that "the steps which have been taken within the Universities to liberate themselves from the all too large influx of students, are unsatisfactory and in some form positively detrimental to the best interests of the Universities." He has further come to the conclusion, that "many of the measures devised to influence the market for professional labour are frankly regrettable and can at best only be excused as emergency measures dictated by dire necessity." He is definitely of opinion that they are not likely to bring lasting relief, and asks "Is there anything further that can be done, or must we simply follow the road of ever more stifling restrictions in the admission to the educational institutions, thus penalising at each step those for whom intellectual pursuits are the very essence of life?"

Dr Kotschnig proceeds to establish a number of theses in order that they may form a basis for further discussion. Opinions may differ when we come to apply in any concrete form, the general propositions laid down by him but these principles undoubtedly indicate the immensity of the problem and the complexity of the issues involved, and unmistakably lead us to the conclusion that no short cut to the solution of unemployment could be possible by the adoption of a policy of restrictive enrolment which has been very aptly called "intellectual malthusianism."

Although I have, to day, discussed at length the problem of education from the viewpoint of careers and occupations and have stressed the need for organising our educational system so that it may fulfil that purpose more effectively, I must ask you to remember that all this should not be looked upon as an end but as only a means to a much higher end. It is true that for a very large majority of people, education could not be altogether dissociated from its utilitarian aspect of preparing men for their livelihood. It is also necessary in this age of growing democracy to train people in a clearer perception of their rights and obligations as citizens. The conditions of a new and changing economic, political and social order make it incumbent upon us to develop in the community more of knowledge and understanding. But it would be a fatal mistake to regard these objects, howsoever important, as the primary function and the fundamentals of education. There are yet for everyone of us some major problems of life in the understanding of which education must help. *We teachers must never lose sight of the fact that education is meant for living a more abundant life than for mere livelihood.* It is, therefore, necessary that the teachers should have themselves a fuller understanding of life. *The spiritual values of education have at present, unfortunately, very much fallen into the background.* Our future hope, however, lies in the new ideals about the child and his education. We are often apt to forget that the child is a 'soul' and is to be respected as such, that it is to be helped in fully expressing itself and not moulded in a fixed pattern however beautifully designed. The pupil is to be encouraged in discovering his own true self, his own divinity. The teachers' work is only to guide and inspire. We need teachers who have human rather than textbook values of life. *We need faith in the immense reserve of spiritual force dormant in the child which is often destroyed by the child labour imposed in the name of education.* What we need above everything else is that we



should have teachers with high ideals and noble aspirations, with sufficient wisdom, understanding and sympathy. We shall then be able to bring up a generation of young men who will have the qualities of vision, courage and self-reliance, and will be able to grapple with the problems which baffle us to-day with clearer insight and plenty of initiative. Vivekananda with true intuition summed up the abiding purpose of education in the ever memorable words: "*Education is the manifestation of the perfection already in man.*"

WELCOME ADDRESS OF THE TWELFTH ALL INDIA  
EDUCATIONAL CONFERENCE, GWALIOR,  
DECEMBER, 1936

BY

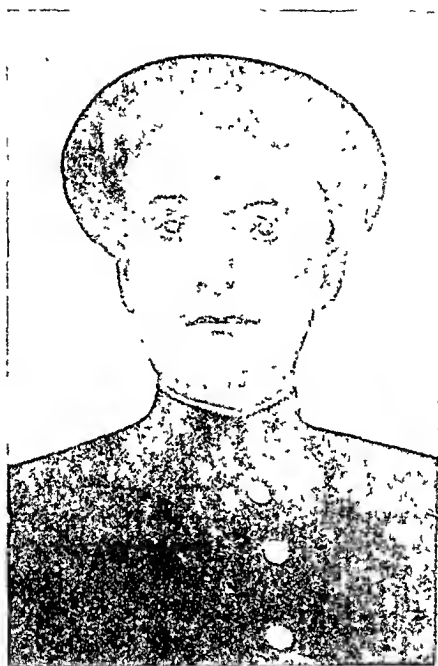
RAO BAHADUR L. MULJE, B A.,  
*Chairman, Reception Committee*

LADIES AND GENTLEMEN,

Few duties appeal to an Indian so much as the reception of esteemed visitors. It is a duty that always fills him with festive joy. This trait in Indian character has been expressed by our saintly poet Tukaram in such apt and eloquent terms that they have since remained unexcelled. I need, therefore, offer no apology for pressing them into service on this occasion. "Our Diwali or our Dasahra is when saints and sages come to us." No other words are either adequate or appropriate to express the cordiality of welcome that I, as Chairman of the Reception Committee, want to accord to you. It is no idle compliment that this visit to Gwalior, of distinguished educationists from all over India, is likened by me to visits of saints and sages of Tukaram's imagination. Plain living and high thinking, purity and piety, service and sacrifice, these are essential characteristics of every form of saintliness, and these are found more or less, even in this decadent age, in all those who have adopted education as either their mission or their profession in life.

Our welcome is all the more cordial because of the meagreness of the means and resources at our disposal. Our poverty was never felt so much as in the course of the arrangements made for your physical comfort and intellectual entertainment. I can only beg of you to make the most of what we have been able to offer, and for the rest ask you to take the wish for the deed.

When our invitation was accepted last year at Nagpur and when I was elected Chairman of the Reception Committee, I asked myself two questions—(1) What have we got to show the Conference in the educational sphere and contribute to the solution of the various problems likely to come up for consideration? (2) What benefit will accrue to us from Conference deliberations, informed as they will be by deep study and wide experience in



RAO BAHADUR L. B. MULYE, MEMBER FOR  
EDUCATION AND MUNICIPALITIES,  
Gwalior State.  
*Chairman, Reception Committee.*

matters educational? The answer to the first question is, that we have got very little to show that will be new or striking. But the answer to the second question is, that we expect to derive immense benefit and enlightenment from the Conference. Thus the advantage is all on our side, and that fact accentuates the sincerity and deepens the significance of our greetings.

Truly speaking education in Gwalior, judged by modern standards, is yet in its infancy. I say this in no spirit of depreciation, inasmuch as this infancy has in its nature all the latent power and possibilities of growing to vigorous maturity. There is no reason to confuse it with arrested growth, simply because it has not yet ceased nor, I hope, will it ever cease to grow and develop. Moreover, you will find that its present lack of stature has been off-set by elasticity and a flow of energy characteristic of early age. Since ideas on education at this moment are in a state of flux, this is rather an advantage, as offering greater facility and freedom for giving our educational activity any desirable shape.

What position education had attained in Gwalior or in some of its important towns, in the distant past, is not relevant to our present purpose. It can only be a matter of academic interest at this date. We know definitely that of its several towns Ujjain, at any rate, was once a great centre of learning and occupied a position of cultural pre-eminence right uptill the Gupta period. It was there that Lord Shri Krishna first drew his inspiration at the feet of his Guru Sandipani in that Rishi's hermitage, and that later the renowned monarch Vikramaditya gathered around him the best brains of the country by his liberal patronage of learning. I however need not labour this point, as it is like carrying coal to Newcastle and tantamount to placing before you what the results of some of your own researches have brought to light. What we are at this moment concerned with is the Gwalior State of to-day since it came to be one political unit and a far-flung outpost of the Maratha confederacy.

For centuries before it came under the Scindia's rule and even some time thereafter, this part of the country continued to be the stronghold of people known for their marauding instincts and pursuits, which its wild physical features only tended to stimulate and encourage. The country remained practically in an unsettled condition till long after the Mutiny of 1857, with few means of communication and without any railway connecting it with the outside world. Apart from this, the Scindia's political independence or semi-independence lasted much longer than that of several other States, because of his great influence both at the

Moghul court and with the East India Company. It was due to these factors and consequent lesser contact and intercourse with British or outside institutions that education in Gwalior continued to move in the old grooves and to remain exclusively in private hands, till a comparatively late period. The modern idea that public instruction is a governmental function and calls for a regular State organization was late in penetrating Gwalior. Prior to the year 1863, therefore, barring a few indigenous Shalas or Maktabas, this State had no educational institutions of the type that exist to-day. The first scheme of public instruction drawn up in that year by the late Sir Michael Filose and adopted by the present Maharaja's grandfather was so modest that it involved an initial cost of about Rs. 4,000 for buildings and a recurring annual expenditure of Rs. 26,000. Teaching of English was first introduced in the capital of the State in the same year, but remained for long so much at a discount as often to cost a man his caste. It was only during the thirty years' regime of the present Maharaja's illustrious father of revered memory that the number of schools steadily rose to 1,010 with about 48,000 scholars, and the educational budget swelled to over Rupees nine lakhs. The first college was opened in Gwalior as an Intermediate College in the year 1890, and was later affiliated to the Allahabad University for Degree Course in 1893. Another college was opened at Ujjain also in the same year. It was entirely due to the late Maharaja's dynamic personality and the inspiration of the late Principals Dhekne and Pran Nath that notwithstanding fierce opposition, female education was introduced in the State, and the first Girls' School was opened in Ujjain in January of 1889 and later in Gwalior in November of the same year. There has been rapid and remarkable progress during the last 11 years of the recent Minority Rule with the result that the State is spending to-day about Rupees 15 lakhs on education and has over 1,400 educational institutions of all denominations inclusive of one Degree College, one Intermediate College, 10 High Schools, about 100 Middle Schools, 12 Special Schools, and 1,300 Primary Schools, with a little over 77,000 scholars in the aggregate.

You will be interested to know that the State is maintaining a number of important special institutions, such as the Scindia School, the Brahmacharya-shram, the Sardars' Daughters' School, the Madhav Music College, the Ayurvedic School, the Sanskrit College and the Vedic School, the Central Technical Institute and the Textile Institute of Chanderi, the Reformatory Schools for

reclamation of wild tribes, the Central Library and the Prachin Granth Sangrahalaya, the system of patronage to authors and, last but not the least, the institution called the "Gorkhi Ashrit Sabha" for the support of Pandits versed in the different branches of Sanskrit learning.

(1) The Seindia School is a residential institution of the High School standard and is modelled on the lines of the English Public School. Its object is to provide high class education primarily for the sons of the State aristocracy and incidentally for those of the well-to-do members of the middle class gentry of the State and outside.

(2) The Madhav Brahmacharyashram is another residential institution of the Gurukul type and aims at educating the sons of the State Muafidars on a mixed system of ancient and modern culture, with a bias for the former. Its object is to qualify the sons of Muafidars for the proper discharge of their duties and responsibilities connected with temples or other places of worship and incidentally to promote, through them, intelligent observance of common religious ceremonies and practices among the people.

(3) The Sardars' Daughters' School is meant for the education of girls of the local aristocracy who need to be trained on special lines to suit their higher status in society.

(4) The Madhav Sangit College and the Ayurvedic Vidyalaya seek to provide facilities, as their names connote, for the study and practice of the ancient art of classical music and the science of Indian medicine, with a view to preserve and popularise them.

(5) The Sanskrit College and the Vedic School provide for the study of that learned language and its rich literature.

(6) The Central Technical Institute and Textile Institute of Chanderi afford to the State youths local training facilities in industrial and technical subjects, and provide theoretical and practical education in those subjects, of a standard adequate to meet the general demand for skilled workmanship.

(7) Schools for reclamation of wild tribes aim at imparting elementary general education and manual training to boys and girls of the wild tribes inhabiting forest or semi-forest villages or settled in separate colonies, with a view to reclaim them to civilisation and to peaceful agricultural, pastoral or industrial occupations.

(8) The "Gorkhi Ashrit Sabha" maintains a considerable number of Pandits by means of annuities varying according to their merits. They have no regular duties, but they serve mostly as referees for knotty questions of Dharma Shastra or other branches of ancient lore. Modest provision has also been made for patronage to authors since the year 1927 whether Marathi, Hindi, Urdu, English or Sanskrit.

(9) Besides the above, provision for archaeological research and preservation of ancient monument, which has admittedly a high educational value and which acts as a corrective to some people's attitude of scanty respect for our past, has been made since the year 1913, and a number of important monuments have since been unearthed or restored.

(10) I may add without vanity that Gwalior is perhaps the first State in India in having introduced theoretical and practical training in elementary agriculture in its rural schools of the Upper Primary and Middle standards. This has been supplemented in recent years by the introduction of suitable handicrafts as a means of recreation and encouragement of hobbies, in some of its urban schools of the same standard.

I am only too sensible that there is little that is inspiring in the facts and figures about education in Gwalior given above, nor are they likely to evoke enthusiasm. Yet it will be conceded that education, as understood these days, had a very late start in this State and that judged by the time it has had, the rate of progress has not been disappointing. But this is not the only or adequate explanation of the comparative backwardness of education in Gwalior. Honestly speaking there was another reason, far more subtle and undefined perhaps but nonetheless real, that made every step forward look like a halting step, taken in a spirit of indecision at a moment of weakness or diffidence. Every advance made was attended with a feeling of unexpressed, but not unfelt, hesitancy or reluctance. On ultimate analysis, the feeling will be found to have proceeded from a conflict between a desire to move forward with the times and a sense of apprehension or doubt whether it was carrying the State nearer to the desired destination or away from it.

This explain, in essence, the late Madhav Maharaja's attitude towards modern education, and was reflected in all the forward steps taken in his time. Some of the observations made by him in the course of his review of the progress of education in the State from year to year are typical of this attitude. Although the temptation is great I shall not abuse your kindness

by wearying you with long extracts from the late Maharaja's speeches and writings, but shall content myself with expressing, in the briefest possible words, the most thought-provoking of objections and ideas that emerge from them:—

(1) The responsibility of Education is great. Opening of new schools in any number is comparatively easy, "but the great trouble at present is about getting the right men to take charge of the youths." Critics little realise or appreciate that "in sending their children to school, the parents place implicit trust in the influence and guidance of the school authorities; and if the education given is not what it should be, it means disaster not only to the students and their parents but also to the State and the country." And yet, strangely enough, numbers appeal to the people ever so much, even though they are not necessarily an index of soundness. Quality should, in matters educational, be much more important than quantity, and ought to claim and receive greater attention. "In the school and the college to-day one great want is men of character. Intellect without character is like a house built on sand."

(2) Good home influence which contributed in the past so much to laying the foundations of character and happy contented life is often missing in modern times, which is natural to the modern age. Therefore the problem demanding solution is, how the want of good home influence is to be supplied in the scheme of State education.

(3) "Teaching at the present day is too mechanical and effete. It neither goes down to the heart nor does it stimulate and inform the brain." Modern schools and colleges seem to function more like taxidermic institutions designed mechanically to stuff their pupils' minds with unassimilable knowledge. Their faculties are more often blocked up by over-stuffing than drawn-out. What is particularly noticeable of the costly products of the present-day system is degeneration—physical and moral, leading to aversion for exertion—as compared with the sturdy men of will and character that the Gurukuls of ancient India used to turn out at far less expense. How one lives is much more important, in any age, than how much one knows.

(4) The present-day education does not appear to be correlated or co-ordinated to life. It has failed to make the country, in the course of its operation of about a century, self-sufficient as regards supply of its different wants so far, at any rate, as the natural resources of the country permitted. What is then the use of acquiring knowledge if it cannot be turned to practical account in every-day life? In the struggle for existence



competition is growing more and more fierce every day, and "the people," as an educationist has observed, "in order to compete and live have to grow not only in literature but in wealth also." Whether modern education has helped in an adequate measure the increase of the wealth of the country or the promotion of the happiness and contentment of its people, is the crucial test. It is no education that fails to achieve these purposes.

I believe the above gist of the late Madhav Maharaja's views is enough to show that his policy in regard to education was not illiberal, but that he instinctively put his finger unerringly on the weakest point in our present system of education, and anxiously awaited a satisfactory solution of the problem by educationists of the country before launching any ambitious scheme. And who can say he was not right? Every educational system rests on and follows the social order and needs of the community concerned. Modern conditions have disturbed our ancient social order and destroyed the old institutions of the joint family and the hereditary professions, necessitating readjustment of society on a new basis. Moreover, modern civilisation with its wonderful mechanical inventions has profoundly disturbed economic values and created undreamt of leisure or unemployment which, if not properly tackled in time, threatens to overwhelm and destroy that very civilisation. All problems affecting man, whether educational, social, economic, or political, are inevitably interrelated. We have flirted too long with the policy of drift, and it is high time that the best brains of the country combined and arrested it by a thorough overhaul and reorientation.

Education is said to be the panacea for all human ill. In every language there are maxims in praise of education. And yet looking around us and surveying the results of the educational system which has prevailed in this country for nearly a hundred years we are set thinking and asking, "whither education?" Barring rare exceptions, to one and all, education is only a means to an end and not an end in itself. The end is that every boy, when grown up, should have been fitted by the education imparted to him to earn a decent living and to turn out a good citizen and useful member of society. We find however that in the large majority of cases this end is far from being attained. The results of the University examinations, year after year, are a melancholy tale. The failures far exceed the successes. That means that those or the majority of those who fail have been misfits, and have simply wasted their time and

their parents' hard-earned money. It is the consequence of forcing all students into one common course of literary education. Bright boys and dull boys, boys with means and boys without means, boys capable of reaching the top of the ladder and aspiring to the higher government posts and the learned professions and boys whose capacity and aptitude cannot justify a higher ambition than the clerical or vocational or manual occupation all are herded together and passed through the same uniform channel. If a minimum standard of general education is made universal and after its completion, if there is a parting of the ways along separate courses, each leading to a separate goal and terminating in a separate examination and if at the point of bifurcation, there is a careful and strict selection of students for the respective courses, the present phenomenon of more failures than successes will give place to "success the rule, failure the exception."

The *sine quanon* of a planned system like that is genuine and organised co-operation between the parents, the teachers, the University and the Government. As things stand at present, the parent is out of the picture altogether. It is forgotten that the sacred responsibility of parenthood does not end with the birth of the offspring. It rather begins then, and is greatest during the schooling period. The parents must therefore be roped in for purposes of co-operation, especially at the time of selection of a suitable course for every boy out of the different ones that shall have to be devised as postulated above. The spirit in which the other parties to co-operation mentioned above, are functioning also leaves much to be desired.

Bound up with the question of different courses are several others, such as the medium of instruction and method of examination, co-education of boys and girls *versus* separate education, the claims of physical, moral, religious and civic education, etc. Side by side with setting the educational house in order, Government and public leaders should concert measures to create "fresh fields and pastures new" outside Government service and the learned professions, which are already overcrowded. There is no time to lose. The menace of unemployment and economic unrest is growing with the growing numbers that pour out of the schools and colleges year after year.

I am afraid I have already trenched upon the province of our learned President. All I wanted to emphasise was the necessity and urgency of a re-orientation of our educational system. And what body of men and women is more competent to undertake this task than the present Conference? This

conference is mainly composed of those who have made education their chief occupation in life. No one else has, or can claim to have so much knowledge and experience of both educational theories and educational practice or has opportunities of studying and testing their interaction on each other. Your work involves constant application of abstract thought to action, and, on the other hand, the concrete results of your action necessarily influence your thoughts. It is, therefore, in the fitness of things that such a body should take upon itself to guide the country at this critical juncture, when the whole atmosphere is in a ferment calling for the evolution of a new polity in the sphere of national education.

It is a happy augury for the future of education in the State that His Highness's accession to ruling powers should be marked, so soon after the consummation of that auspicious event, by the present session of the All India Educational Conference being held in the capital of the State. I have no doubt that His Highness will be much interested in the deliberations of the Conference, the present session of which has been greatly facilitated by his munificent donation. We are all deeply indebted to His Highness for the honour he has done us by visiting this Conference and inaugurating its proceedings.

Education is pre-eminently an All India subject. The political division between British India and Indian India and between one Indian State and another, affects and governs many an administrative question. But education is a human problem, transcending all geographical and jurisdictional limitations. Your session this year at Gwalior is a happy recognition of the truth that India is one integral whole on the mental and spiritual plane, and all Indians have a common destiny and have to endeavour and work hand in hand towards that destiny.

It is indeed fortunate that we have been able to secure no less eminent an educationist and man of solid scholarship than Pt. Iqbal Narayan Gurtu, to guide the deliberations of this Conference. Himself an outstanding example of the best that the modern system of education can produce, he has laboured ceaselessly and at great personal sacrifice to serve and promote the cause of education in the country. His has been a life long and single minded devotion to a cause that holds out little promise of personal material advancement. There is no aspect of education that has not received his thought and attention. His interest in that subject has indeed been so great that though far better and more lucrative careers were open to him, he elected to renounce them all in favour of what constitutes the basis of all

other activities for the advancement of the country. I feel confident that under his leadership this Conference will be enabled to tackle satisfactorily some of the most serious problems that it is called upon to consider.

## WHAT IS YOUTH

**Y**OUTH is not a time of life, it is a state of mind. It is not a matter of red lips and supple knees; it is a temper of the will, a quality of the imagination, a vigor of the emotions, it is a freshness of the springs of life. Youth means a temperamental predominance of courage over timidity, of the appetite for adventure over loss of ease. Nobody grows old by merely living a number of years, people grow old by deserting their ideals. Worry, doubt, self-distrust, fear and despair . . . These are the long, long years that bow the head and turn the growing spirit back to dust.

You are as young as your faith, as young as your self-confidence, as old as your despair. In that central place of your heart there is a radio station; so long as it receives messages of beauty, hope, cheer, courage, grandeur and power from the earth, from men, and from the Infinite, so long are you young. When the wires are all down and your heart is covered with the snows of pessimism and the ice of cynicism, then you are grown old indeed—and may God have mercy on your soul.

# RECONSTRUCTION OF INDIAN EDUCATION

BY

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The Indian educational world is resounding with discussion of the problems of Educational Reconstruction. In these discussions nothing is more surprising than the almost revolutionary change that has come about during the last few years in official opinion on the subject. It is well known that when at the time of the public agitation against the Partition of Bengal at the beginning of this century the existing system of education was denounced as unsatisfactory and a national system of education was proposed and attempted as a change for the better in several places, everything was done by Government to run down the movement. A similar unbending attitude of official disfavour was assumed by Government when non-cooperators, under the leadership of Mahatma Gandhi, condemned the present system of education and struggled hard for its radical change fifteen years ago. Now, however, after all the popular ardour for reform of education has altogether cooled down, comes a voice from the headquarters of the Government of India, declaring the present system to be defective and suggesting a radical readjustment of it. This official inspiration has set educational authorities all over the country a-thinking as to what is wrong with the present system and how, if something is wrong with it, it might be cured of its defect. At every university convocation and at every educational conference some reference is invariably made to the subject and various plans are suggested for its satisfactory handling. This agitation of the question at the hands of leaders of educational opinion is, indeed, welcome. Care, however, appears to be necessary on the part of teachers and others concerned in education to be clear on certain issues involved in the consideration of the matter. In the first place, it is necessary to remember that reconstruction is easier and less costly if it is done on existing foundations. Hence, it is advisable to retain all that is worth retention in the present system and attempt reconstruction, as far as possible, on that basis. The present system has grown up during the last hundred years as a result of endeavours made by Government at its inception to meet

certain administrative needs Government needed English knowing Indians to man its offices and official minded Indians who had lost their jobs on account of the change of Government needed employment under the new regime Education was thus given mainly with the view of creating a supply of civil servants and was sought mainly with the view of obtaining the necessary qualifications for government service It was given and taken from a narrow utilitarian point of view Now that these administrative needs have been more than supplied and other more urgent social, civic, economic, and industrial needs have arisen, it is necessary to revise and, where necessary, reconstruct the system so as to root it in the native soil and relate it to the life of the people and adapt it to the changed and changing needs of the present day

Another important thing to note in this connection is the need to insist that in any plan of educational reconstruction that may be proposed there should be nothing that will have even the remotest effect of curtailing the existing facilities for secondary and university education We have not yet, in our higher education, reached a stage at which we should be justified in crying 'halt' We have one college student in a population of 3352 against one in 1013 in England, in 741 in Wales, in 473 in Scotland, in 808 in Italy, in 604 in Germany, in 579 in Holland, in 543 in Sweden, in 480 in France, in 387 in Switzerland, and in 125 in the U S A All talk of restricting the benefits of university education to "the aristocracy of intellect" is, therefore, premature

Further, there is a general tendency on the part of educationists who discuss this question to link the question of educational reconstruction with the question of unemployment of the educated This tendency has the effect of confusing two different issues While the first question concerns the present and future generations of youth of the country, the second concerns the generation that has left the portals of our secondary schools and colleges and has been thrown out on the employment market While the first question is educational, the second is, strictly speaking, economic Unquestionably, both need careful consideration not together, however, but each independently of the other In handling the one, we need to consider how we should readjust or reconstruct our present educational system so as to prevent further additions in future to the large armies of the educated unemployed and unemployable, in handling the second we need to consider the measures that might be taken with a view to finding suitable employment for the educated unemploy

ed that hang on the market and the measures that might be devised with a view to providing suitable training for the educated unemployable so as to render them employable.

In readjusting the present system to the varying needs of different classes of pupils, it is necessary to remember that in the present state of opinion of parents and pupils, it is impossible to expect any pupils to turn to vocational institutions, even if they are provided, in preference to the present type of institutions of secondary and higher education, unless and until they are assured that their preference for them will not have the effect of dubbing them as inferior in mental talent and being treated as such by the world at large in the economic, social and other fields of life. Our existing technical and industrial institutions have come to be looked down upon as institutions for misfits and unfits of the ordinary secondary schools and colleges. This mark of inferiority attaching to them in the public mind accounts in no small measure for their comparative unpopularity. If the new vocational institutions that may be provided to meet the vocational needs of certain classes of pupils of our secondary schools are started as separate institutions, there is a great danger that they, too, may, in course of time, come to be treated as inferior and may be shunned by the majority of the pupils seeking secondary education. To avoid this danger, which is not imaginary, it is advisable to provide for vocational education in our ordinary institutions for secondary education. Instead of offering only one uniform course of general education they may offer additional alternative courses of vocational education in commerce, industrial training, agricultural training, art training, domestic training, and elementary teacher training, as is done in the Philippines and meet the different needs of the pupils. The alternative courses provided should, further, lead to the School-Leaving, Matriculation, or University Entrance Certificate of the same market value as the present course, so that those obtaining it on satisfactory completion of their chosen course might have the same status in the world at large. It should be possible, by suitable readjustment of the new-type secondary school courses, to enable pupils completing their course, if they chose to do so, to proceed straight to institutions of advanced study of their respective subjects and to obtain the university degree in them. The new-type secondary (or, preferably post-primary) school suggested above should also leave it open to pupils who have chosen a particular course to turn back from it if they find it unsuitable and take to another if they choose to do so. In a word, alternative courses of secondary education, both literary



and vocational, should be provided with perfect freedom to pupils to choose from them and turn back from any they have chosen if it is found on trial to be unsuitable. We live in an age of educational freedom. Any scheme of educational reconstruction should, therefore, provide freedom to pupils to change from one course to another. Further, it requires to be noted that the alternative vocational courses provided in the secondary school should not be purely vocational. They should all be both cultural and vocational, requiring half the time each day to be assigned to cultural subjects and half to vocational subjects. We cannot afford to omit the teaching of cultural subjects altogether from any scheme of reconstruction of secondary education. It must certainly remain, but it should not monopolise the whole of the school time as it generally does now. It should allow for equal attention to the practical and vocational needs of other pupils in the school whose number is increasing from day to day.

Lastly, it has also to be borne in mind that with the introduction of alternative vocational courses in schools, adequate arrangements will have to be made for the supply of qualified teachers, inspectors, and examiners of vocational subjects and for the administration of the vocational branch of the Departments of Public Instruction.

# PARENTS AND THE VOCATIONAL ADJUSTMENT OF YOUTH

BY

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The great number of young men out of school who are unable to find useful and profitable employment presents a problem that calls for careful and prolonged attention. Parents who send their sons to school at considerable expense and sacrifice to themselves and to the State often with just reason, blame the "educational system" for the hardships experienced in finding employment. Many remedies are offered and one sincerely wishes that the cure for unemployment were as simple as some that are suggested. It should be emphasised in passing that the problems of unemployment will not be effectively solved by a mere flaying of the "educational system." The need for an early and adequate adjustment in our educational goals and techniques is evident to many. Perhaps educationalists themselves are the first to see this need.

The type of education in force at a given time reflects the will of the people to a considerable extent. If there is an undue emphasis on English education, for example, at the expense of the mothertongue, it is possibly because parents' demands for their children can be met only in this way. There is more than one grain of truth in the statement that "those who plead for vocational education usually have in mind the children of others, rather than their own." So perhaps the first step in modifying our educational goals is to consider the demands of parents. First of all, education apart from definite employment must be regarded as a good thing in itself. Its first purpose is to enrich life through the development of pupils' personality and character. In achieving such goals much will already have been accomplished toward fitting youth for useful employment.

Vocational schools can do much toward preparing young people for employment but such schools are costly and they require a specialized type of administration. At best they can serve but a relatively small number. Only certain selected communities can hope for the advantages of special vocational

schools For the country at large there must be a wide emphasis on pre vocational education as a preliminary step in future vocational adjustment This would require instruction in wood craft, art metal, fibre, art leather work or agriculture in High Schools and middle schools That is, one or more of these crafts would be selected for each school, according to the need and interests of the local community

Most provinces have already made some provision for pre vocational classes in their curricula Much must be done now to make parents aware of the merits of such training for their own children Many classes started with good intent, have failed for lack of support on the part of parents and because of the half hearted efforts of teachers Perhaps we cannot expect parents to support such classes ardently until they are given some information as to the worth of pre vocational experience for their children

Pre vocational education offers many advantages It at once shows the relation between education and the common life of the community A vital course in woodcraft or manual training greatly quickens a boy's interest in many of the practical affairs of life Whether a lad may become a teacher, a doctor or a mechanic, some experience in the use of tools is essential to his proper development During the years of adolescence every boy should have the steadying influence of some pre vocational interest This may later become a "hobby" or an avocation for him

Woodcraft is clean and healthful It develops individuality and initiative The work of every class period can be clearly seen and evaluated There is no place for cheating or copying Honesty is the naturally accepted practice for any class in woodcraft

Woodcraft is inexpensive The simple tools needed can be purchased in any good bazaar It is economical as to time With guidance pupils can begin making useful articles from the first day I have seen many students who had no previous experience develop rather remarkable skill from spending three hours per week for a period of one year The possibility of designing new models in toys stools, tea poys, and simple home articles leaves a splendid opportunity for developing pupil originality and initiative The skilful use of colours and polish in finishing articles does much for developing the esthetic tastes *During adolescence there is perhaps no experience so meaningful to a lad as the thrill of pride that comes to him when he has completed something of use and beauty with his own hands*

With brief teaching, or better still a practical demonstration parents are quick to see this. The costs of material used can generally be recovered readily; for parents will wish to pay for materials so their boys can bring home any articles they have made.

A local carpenter can be used if no trained teacher is available, but it will be better to depute a teacher for a short time to a school offering such training. Where there is but one class in wood working the teacher will be able to give the remaining part of his time to other subjects in the curriculum. No full-time teacher need be employed for wood working alone.

What has been said with reference to wood working, would also apply to work in metal, fibre and leather; but from wide experience woodcraft is considered superior to other crafts for developing character and vocational aptitudes.

Again, experience with growing plants and animals should have a part in the training and development of every youth. Agriculture is more than an occupation. It has well been called "a manner of life." In studying the plant and animal life of a country from the standpoint of agriculture we open the eyes of young people to new and fresh interest in life about them. The inexperienced will say, "but we know all about farming." As a matter of fact we know very little about agriculture,—almost nothing if we regard the amount that may be learned. The habits of plants and animals and their nutrition and care will suggest a simple beginning. From these the teacher and class may go as far into chemical and physical wonders of the soil, plant and animal life as they are able.

Education must impart a quickened interest in and appreciation for the environment in which children live. For this the study of agriculture is exceedingly helpful. It is essential to the life of the people in any country.

Pre-vocational experience for students will extend their range of vocational aptitude. During his school career a boy may thus acquire some initial experience in several trades or vocations. If he then enters a vocational school he can select his vocation more wisely because of having a background of experience. He will already have developed a number of skills that will help him in whatever work he enters. There is of course need for specialization but the boy who has developed the skill and the will to "turn his hand to anything" is the one who can usually find a job and hold it.

The writer has observed the vocational adjustment of students of the Vocational Training School for ten years. During

the vernacular standards 6th, 7th and Vernacular Final all have received a wide range of experience in agriculture including the care of animals, gardening and woodcraft. This pre vocational experience, both theoretical and practical, has been given in connection with the usual vernacular education through the seventh standard.

After passing the vernacular final examination about half the students were selected to enter the Training School for Teachers. The remaining students who during the past ten years passed vernacular final and went out to find work *other than teaching* were employed as follows on April 31, 1936

Farm managers	2
Farming	52
Farmworkers	20
Carpenter farmers	10
Carpenters	12
Students in Bible School	2
Students in English School and College	14
Shopkeepers	4
Tailors	6
Poultry husbandry	5
Carpentry Teachers	2
Local land officer	1
Assistants in hospital	3
Police department	5
Excise department	2
Forest department	8
Toll collectors	3
Mill employees	10
Railway employees	4
Butlers	2
Not employed	12

It should be noted that in general the more promising students were selected to enter the training class. Some of course who seemed to possess special vocational aptitude were guided into vocations. The pupils are largely from rural districts.

Some of their parents own small amounts of land, while many rent a few fields and farm or work for others as labourers.

The figures above suggest two things. First, a relatively wide range of vocational adjustment. Those who have any access to land generally choose farming. The larger number having no such access have, as will be seen, found employment in a varied range of occupations.

Closely related to this is the relatively small number who are unemployed. This is accounted for partly by the fact that during pre-vocational training the pupils were urged to develop a wide range of skills so they could take up any useful job they could find. Nearly all except those who are classed above as farm workers, seem happy and satisfied with their work. Those in farm labour accept it as temporary while they continue to seek for something having a more hopeful future. During the past year one boy who had been a farm labourer secured a job for a while as a poultry husbandman. After six months at this work he found a position in a Local Board School where an untrained teacher was required.

Our experience suggests that boys who have a rather broad background of pre-vocational experience are relatively free from the "white collar" difficulty when they go out to find employment. They are qualified to take up any useful work that presents itself. Parents themselves, perhaps, more than any educational department hold the key to progress in pre-vocational education. It would seem that one of our first steps is to acquaint parents with the advantages of pre-vocational experience in the development of youth.

# THE FILM AND PHYSICAL EDUCATION

BY

SHEIKH IFTEKHAR RASOOL

Amongst the many services which the screen has rendered to the world I count as one of the greatest its almost continuous propaganda in favour of physical education

From their very earliest days the films have idealised types of first class physical development, preaching, may be unintentionally, a doctrine which has helped the world along

Health and vitality are not only necessary to the complete enjoyment of life, they are necessary to life itself. Believe me, the old law of the survival of the fittest still holds good. It must hold if we are to progress, and as believers in evolution we must know that each generation moves forward. The lower races of mankind are becoming extinct, the world no longer needs them. It needs healthy minds, healthy brains, and these in their highest form are only to be found housed in healthy bodies

## Doctrine of Physical Education.

It would not be out of place to mention that this doctrine of physical education began with the very earliest films. The Western films of about ten years ago brought to the screen men whose outstanding characteristics were courage and physique. Those cowboys may have been rough and tough and reckless, but nevertheless they also portrayed many desirable qualities. Respect for women—a scrupulous regard for a given word—and a standard of health and endurance which not only endeared them to youth the world over, but set before that youth a goal to be striven after.

Every advance any one of us makes towards physical and mental fitness, every addition we make to our knowledge of our own bodies, every development we achieve in our judgment of events and of tendencies, each field of mental imagination or speculation to which we can find an entry, must inevitably increase the sum of our individual happiness and well being.

We may have fallen, we may have risen. All that concerns us today is that so far back as recorded history and even as legendary tradition informs us Man is and has been ever rising, progressing upwards, developing not only individually, but in the

mass, ever to higher and mental states. This can be safely asserted, even if we have to admit that the human race has almost as continuously been afflicted by a succession of new diseases or by variations of old ailments which we perceive to have been developed within us as by-products of our evolutionary progress. Yet medical science—and in more rapid progress since the medicine men have commenced to realise the assistance they could derive from alliance with Physical Education—has contrived to cope with these diseases.

Prevention, however, is proverbially to be preferred to cure, and there is today more than an outside probability that within a very few generations man will have discovered his path to the wide open door to the impregnable fortress of Strength and Health—that door which physical education has forced and wedged wide open for all to enter.

### **Mental Improvement of the Child.**

There is definite evidence that physical activity has a direct and advantageous bearing on the academic possibilities of the schoolboy. 'All work and no play makes Jack a dull boy.' This is generally interpreted merely as a warning against over-work, but if the emphasis is placed on 'makes' instead of on 'all' it will be found to imply that it is the recreational side of his training which prevents Jack from remaining or from becoming a dull boy.

If the saying is regarded in this light, it shows clearly that participation in physical exercise was long ago appreciated as of value in stimulating the more purely mental functions. The truth—that the exercise and training of the body through physical means has a beneficial effect on the mental side—has been again affirmed.

Apart from the increased alertness of mind, the quicker reaction and fuller response to a stimulus, the finer powers of co-ordination, and the development of the will, there is a further definite educative benefit derived from the practice of physical training—the improvement of mental functioning measured in terms of scholastic attainment.

Although this aspect of physical education is not new, its real value has only come to be appreciated fairly recently. With the coming of film magazines sensible physical education has received further impetus. The public reads and takes interest in them and in the private lives of the stars. They realise and understand how strenuously their favourites work at the maintenance of their health and strength.



## The Role of Films.

The films not only teach us these but many other kinds of sports which are popular to day. Motor racing, boxing, flying, football, wrestling, all of them serve to stir public imagination and awaken still further interest in healthful exercises. And apart from this the screen hero always represents some type of physical attainment. He provides, as it were, a standard against which the ordinary man measures himself. Above all, a standard for the younger generation to emulate.

Great work has been done in foreign countries, especially in England, where films have been made illustrating the work of physical education in elementary schools and colleges. These films offer convincing proof of the valuable service to education which may be rendered by the combined efforts of various institutions, teachers and trade.

The aim of these films is to provide the leadership and the facilities that will make it possible for individuals and groups to react in situations that are physically wholesome, mentally stimulating and satisfying and socially sound. Its objectives are organic vigour, a reasonable degree of strength, physical skills useful now and throughout life, a good emotional attitude towards play and games, good social conduct, and wholesome living in every aspect of life.

It is a pity that few attempts have been made in our country in this direction except in the Sind Province where some sort of drill has been made compulsory by educational authorities. Our present day social order requires citizens of good character, citizens possessing good social conduct. A good society is made up of people possessing a sense of justice and fair play, a spirit of co-operation, loyalty to worthwhile causes, initiative, resourcefulness, courage, physical, mental and moral stamina. These qualities can be developed only as we provide experience requiring the practice of such qualities. These games, if well organised and well supervised, afford the greatest opportunity for developing the qualities of character which make for good citizenship.

## A SURVEY OF SCHOOL EXAMINATION MARKS— PART II

*(Investigation of marks in English and Mathematics  
of classes III to X for four consecutive years.)*

BY

SACHINDRA NATH CHAKARBARTI, MSc., L.T.,  
*Asst. Master, Govt. High School, Fatehpur.*

### Introduction.

In the first part of the paper published in this Journal,<sup>1</sup> I made a study of the correlation among different school subjects on the basis of the marks obtained by the boys of class X in one of the examinations of Govt. High School, Fatehpur. In another paper,<sup>2</sup> the correlation between English and Mathematics was studied on the basis of the marks in these subjects obtained by the boys of classes IX and X in different examinations of the same school. During the course of these two studies, I pointed out that more investigation in this direction was desirable if some conclusion was to be arrived at. A regular investigation was also thought necessary in view of the fact that I, as a teacher of Mathematics, have observed that in spite of a large number of passes and distinctions in Mathematics in the High School Examination of these provinces, the boys show a remarkably poor knowledge of the elementary principles of Mathematics. In my opinion the stuff sent out from our schools is not what is desirable—at least so far as Mathematics is concerned. I think that if a systematic study of the marks obtained by our boys from class to class be made, we may trace the defect to some stage of the school life of the boy. With this end in view, I have studied the marks in English and Mathematics obtained by the boys of classes III to X of the Govt. High School, Fatehpur, in the Half-Yearly Examinations of 1932-33, 1933-34, 1934-35, 1935-36; and I have discussed the observations in the following pages. Since in this particular school, the Vernacular Final passed candidates are placed in separate sections (B Section), I have also studied the results sectionwise in order to compare

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<sup>1</sup> "A preliminary study of correlation among different school subjects." *Indian Journal of Education*. May and June, 1936.

<sup>2</sup> "Research in Education," *U. P. Education*, May, 1936.

the performances of these two distinct types. I have confined the investigation to the study of average marks, the standard deviations (which indicate the limit of the average majority—about 68% of the total number) and the correlation between English and Mathematics. The results have been tabulated in Tables I, II and III and discussed below.

### Observations and Discussions.

TABLE I

MEANS AND STANDARD DEVIATIONS IN ENGLISH

(From 1932-33 to 1935-36)

(Average number of boys 32 in each class)

	MEANS						STANDARD DEVIATIONS											
	32	'33	'33	34	34	35	'35	36	Average	37	'33	'33	34	34	35	'35	36	Average
III	61	59	46	44	52			18	18	25	21	20						
IV	55	37	52	44	47			16	15	15	21	17						
V	47	31	43	38	40			19	20	16	15	17						
VI	42	42	39	41	41			12	9	18	18	14						
VIIA	44	41	32	30	37			14	12	12	15	13						
VIIB	42	35	37	22	34			13	14	12	20	15						
VIIIA	37	37	37	31	35			12	14	11	12	12						
VIIIB	41	36	34	30	35			15	10	12	10	12						
IXA	28	33	35	30	31			9	9	11	12	10						
IXB	30	36	35	31	33			11	12	11	11	11						
XA	39	41	37	35	38			9	9	10	11	10						
XB	42	43	37	34	39			10	11	9	7	9						

A general survey of the means shows that somehow or other, with a few exceptions, the means have progressively decreased from year to year. This may be due to several factors and the important ones are (i) the general lowering of the standard in English, (ii) the general strictness in the standard of examination, (iii) the general deterioration of the quality of the boys. Whether all or some of these causes were at play can not be ascertained from the evidence at our disposal. We may only say that no such progressive decrease is marked in the case of Mathematics (Table II). Another observation is that the means vary more widely in the lower classes than in the higher. This shows that in the lower classes the types of boys differ from year to year. A more uniform standard is maintained in the higher classes. For the sake of

comparison the average mean marks and standard deviations for four years for each class have also been calculated (Tables I and II). These averages show that the means are higher in the lower classes class III topping the list with 52%. The mean for class IV is also sufficiently high (47%). The means for classes V and VI are lower and then it goes on decreasing and comes down to 31% in class IX. In class X the mean is comparatively higher (39%). It is significant in view of the fact that this is the class which is going to sit for a public examination and hence, probably, both the teachers and the taught exert their maximum.

One interesting observation is that if the performance is studied sectionwise, it is found that except in class VII the proficiency in English of both the sections are similar. In class VIIB, the boys are just beginners in English as they have come to this class after finishing a four years' course in one year in the "special class." Hence they are distinctly inferior to the boys of the other section. They make up this deficiency very soon and when they reach the highest class they are as good as those of the other section if not superior. In the middle sections, of course, the boys of B sections, on the whole, score a little less. In order to distinguish the mean scores of the two sections, the B section scores have been given in bold type.

The *standard deviations* indicate the limit of spread of the average majority (68% of the total number). Those below the lower limit are inferior to the average and those above the higher limit superior. The standard deviation is very high in lower classes and goes on decreasing from class to class till it is lowest in class X (about 10). This is as expected. In the lower classes the grouping is of a very heterogeneous character and the first lessons in English are grasped in as many different ways as there are boys and hence the proficiency also varies widely. The decrease in variation from class to class along with the decrease in means shows that the superior group and the inferior group are brought closer to the average group. This may be due to group teaching and also due to the fact that knowledge becomes more systematic as one advances. The standard deviation of VIIB is higher than that of VIIA because VIIA boys got the opportunity of systematising their knowledge for four years whereas the other section got the change for a year only. The low standard deviation in English in general shows that either the classes are more or less homogeneous or that the present system of examination in English cannot discriminate well between boys and boys.

It is significant that the means and standard deviations in English of class X are not much different from those obtained in the case of High School Examination<sup>3</sup> (H S E—mean 36.8, s.d. 9.7 Class X—mean 38.5, s.d. 9.5). This shows that the average boys of class X of this school are not much different from those sitting for the High School Examination.

TABLE II

## MEANS AND STANDARD DEVIATIONS IN MATHEMATICS

(From 1932-33 to 1935-36)

(Average number of boys 32 in each class)

	MEANS						STANDARD DEVIATIONS											
	32	33	33	34	34	35	35	36	Average	32	33	33	34	34	35	35	36	Average
III	38		64	64	58			56		15	22	23	24		21			
IV	54	46		52	58			52		21	22	24	22		22			
V	56	36	26		33			38		19	21	23	24		22			
VI	31	31	48		46			39		22	21	31	31		26			
VIIA	34	26		37	39			34		15	20	21	28		21			
VIIIB	57	49		47	71			56		19	16	24	23		20			
VIIIA	31	40		41	39			38		18	17	25	21		20			
VIIIB	49	53		39	63			51		20	19	18	21		19			
IXA	44	39		36	31			38		17	21	21	16		19			
IXB	46	47		40	36			42		15	16	19	18		17			
XA	39	35		43	49			41		16	16	13	16		15			
XB	34	36		48	64			45		13	12	14	14		13			

The Mathematics marks provide good food for thought in more ways than one. Since this subject is a better discriminant of proficiency the individual marks vary widely and hence the means are rather unreliable as they are far off from the extremes. The high standard deviation in Mathematics is due to this wide variation. A glance at the Table II shows that if classes III and IV and the B sections are excluded, the means are rather low: class V—38, VI—39, VIIA—34, VIIIA—38, IXA—38, down to 15 in class XA. The standard deviation gradually decreases and comes sufficiently high—higher than the other classes without a correspondingly high standard deviation. This shows that the spread of the average group in these two classes is similar to the

<sup>3</sup> Unpublished records and the present author. Investigated by Rai Sahib D. N. Mukherji

other classes. A higher mean with a comparatively lower standard deviation shows better stuff. From this observation it will not be unreasonable to assume that the performance of classes III and IV in Mathematics is distinctly better than that in the higher classes (excluding B sections) and that the boys of classes III and IV have got a better grasp of the mathematical principles. There is a sudden fall—from 52 to 38—in class V. This small mean remains almost a constant factor throughout the rest of the school life—the only exception being class X where the mean is slightly higher. This exception is probably due to the combined efforts of the teacher and the taught to reach the ideal of our school life—I mean, success in the High School Examination. The mean is lower still in VIIA—probably due to the introduction of two new factors in this class—Geometry and Algebra—which are probably treated as two subjects distinctly different from Arithmetic. Hence a better comparative study would be to investigate the marks in Arithmetic from classes III to IX—at least from classes III to VIII where Arithmetic forms a separate paper.

A similar state of affairs is found with the B section boys. In classes VIIB and VIIIB, they show a sufficiently high mean almost identical with the means of classes III and IV. Classes III and VIIB have one factor in common, that it is their first year in Mathematics in the Anglo-Vernacular School and classes IV and VIIIB have passed one year more of this life. After passing 2 years of the school life, the B section boys also begin to show a lower mean and try to come down to the low standard of the other sections. It is really difficult to understand why this should be. If the boys have proved themselves to be superior in Mathematics, why should they begin to lose their position? Why should each year of school life bring the boys down so far as Mathematics is concerned? If this be the state of affairs in other schools also (and it is important that this should be investigated) can we say that our schools are functioning properly in this direction? The boys cannot be held responsible for this. They have proved that they are capable of doing well in Mathematics. Hence there must be something seriously wrong somewhere. Of course it is possible that the boys of classes III and IV are examined more leniently but it is not likely that the boys begin to be examined very strictly as soon as they cross the primary stage. Moreover, we have got the evidence of VIIB and VIIIB also, who are usually examined very strictly as they are supposed to be strong in Mathematics. One thing, of course, may be said in defence that the mathematical principles taught in classes III

and IV are mostly of a mechanical character and in class V begins the application of the mathematical principles in working out problems and this "applied arithmetic" is at the bottom of the low averages. But what one cannot understand is why the application should be difficult if the principle has been grasped well. It suggests that the problems are treated as something completely different from the "mechanical arithmetic" learnt in the lower classes. The separate topics are probably closed in water tight compartments. I, as a teacher of Mathematics to the highest sections, have observed boys showing appalling ignorance of the elementary principles of Mathematics. The decimals remain a difficult proposition up to the last and incidentally it may be pointed out that decimals are taught in class V. Whatever the reason may be, it is definite that somewhere in the lower middle sections begins the defective assimilation of mathematical principles, which probably persist up to the last and it is highly desirable that investigations are started in other schools as well, to make a proper diagnosis.

It may be noted here that the mean and the standard deviation in class X are almost similar to those obtained for High School Examinations<sup>4</sup> of these provinces (H S E—mean 47.5, s.d. 15, class X—mean 44, s.d. 15).

TABLE III  
CORRELATION BETWEEN ENGLISH AND MATHEMATICS  
(From 1932-33 to 1935-36)

	<i>(Average number of boys 32 in each class)</i>				
	1932-33	1933-34	1934-35	1935-36	Average
III	0.69	0.03	0.19	0.40	0.33
IV	0.12	0.36	0.55	0.34	0.32
V	0.66	0.58	0.58	0.58	0.60
VI	0.40	0.39	0.77	0.64	0.55
VIIA	0.54	0.56	0.19	0.74	0.51
VIIIB	0.43	0.62	0.62	0.24	0.48
VIIIA	0.34	0.70	0.25	0.53	0.46
VIIIB	0.54	0.58	0.59	0.29	0.50
IXA	0.50	0.43	0.52	0.74	0.55
IXB	0.02	0.27	0.64	0.68	0.40
XA	0.42	0.59	0.34	0.47	0.46
XB	0.72	0.38	0.48	0.49	0.52

<sup>4</sup> Unpublished records

The correlations under the circumstances stated above are bound to be unreliable and spurious. The average correlations as calculated show that in classes III and IV these are very low (0.33 and 0.32) whereas in the higher classes they fluctuate between 0.4 and 0.6. It is interesting to note that the average correlation for class X as calculated in Table III is not much different from that shown in a previous paper published in this Journal (May-June), showing that the correlation obtained for the highest class is more or less constant for the same school at least. It will be of interest to calculate the correlation between English and Mathematics for the High School Examination and make a comparative study of the two. Investigations along this line are in progress.

### Concluding remarks

The present investigation throws considerable light on the progress of the boys in English and Mathematics from class to class. It shows that certain factors are at play in this school at least which tend to lower the average standard in both the subjects as we advance from stage to stage in the school life. It is worth investigating whether it is a provincial defect or a divisional defect or a defect peculiar to this school only. Our schools stand for regular progress in every subject and hence observations to the contrary are rather disconcerting. This setback in the progress may be due to many factors. The general atmosphere of the particular school, the method of teaching, the subject, the arrangement of the syllabus of the subject from class to class, the methods of admission, examination and promotion and above all the ideal to be aimed at—all play an important part, in the school life of a boy. So long as the High School Examination stands as our Ideal, the progress is bound to be slow and limited—particularly so when the High School Examination follows the stereotyped rut and is not free from the defects of Examinations in general. We must lead the boys to observe that this examination is only a stepping-stone to the real development of their selves and not the ideal to be strived for. This is bound to improve the situation a little at least.

In the end I must thank Rai Sahib D. N. Mukherji, Principal, Agra Training College, and Mr. D. P. Khattry, Headmaster, P. P. N. School, Cawnpore, for their unfailing interest throughout the progress of the work. I must also thank my Headmaster, Mr. R. B. Seth, for making the data available for this investigation.



## EDITORIAL NOTES

BY

PRINCIPAL P SESHADRI, M A ,

*President, All India Federation of Educational Associations*

The recent Twelfth All India Educational Conference held at Gwalior must be considered a gratifying success from many points of view. Educationists had assembled from various parts of India, though their number could have been larger, and it was indeed an All India Conference. There were delegates from Kashmir and Travancore and also from Assam and Sindh.

The arrangements were of a high order and everything concerning the Conference went off well, thanks to the cooperation of the workers and the delegates and the desire on the part of everybody to have an atmosphere of harmony. We had an excellent Presidential Address and valuable work was also in evidence in the various sections. Sir Kailashnath Hakkar delivered, for instance, an excellent address in the Internationalism section reviewing the present situation in the world. In spite of the apparent failure of the League of Nations in recent months, Sir Kailashnath was not pessimistic and hoped that it would well be an effective instrument for Internationalism in the future.

A special tribute must be paid to His Highness the Maharaja of Gwalior for his gracious interest in the Conference. It is a hopeful augury for the future that almost at the threshold of his career, he has been so intimately associated with an All India Educational Conference, drawing attention to the important part played by Education in the administration of the State. The delegates had the high honour of being invited to the palace for a banquet for the first time in the history of the Federation and His Highness endeared himself to the teachers by his easy and democratic ways which will be remembered by every one of them with gratitude. The idea apparent in the minds of everyone of these was that the young Maharajah who had just been summoned to his exalted office and who had admirable opportunities for moulding the destinies of thirty five lakhs of his subjects might prove a great success and create a place for himself in the hearts of his own people.

It would be invidious to mention particular people who had helped to make the Conference a success with such

undivided aim and ready willingness. Rai Bahadur L. B. Mulye, till recently Education Member, was the main-spring of inspiration and did much to impart a spirit of smoothness by the suavity of his own personality. He was ably supported by his two lieutenants, the Deputy Inspectors-General of Education, Messrs. Dani and Razdan, while one of the most hard-worked men in the Conference was Mr. Wajpayee Bhimpure who has been with the Federation since the very inception. Reference must not be omitted to such a quiet and unostentatious worker as Mr. F. G. Pearce, one of the pillars of the Federation, and Dr. Divekar whose unobtrusive work could be noticed by any sharp and discerning eye.

If the proceedings of the Conference kept some of the delegates from visiting the exhibition held under the auspices of the Conference, they lost a real pleasure. Though not on a magnificent scale, the exhibition was very instructive and attracted a large number of visitors including ladies and children. It was a tribute to the progress of education made in Gwalior State and also a fine insight into the recent developments in educational method and practice, all over the world. The stalls exhibited by well-known publishing firms should have enabled teachers to acquire some knowledge of the latest literature available in their subjects.

The Conference had some special features deserving mention. Almost for the first time in the history of the Conference, the delegates were not charged even for their boarding and were lodged comfortably very near the Conference, in the numerous hostels adjoining the Jinsi buildings. There were musical entertainments during all the Conference days, though delegates did not always find it possible to attend them regularly. Ladies had taken a prominent part in the organisation and proceedings of the Conference. There were garden parties almost every day, at the Museum and at the Race Course and also a dinner at the palace, while at other places, the Conference had generally to be content with only a single tea. There was also a splendid Military Display, thanks to general Raja Rajwade, the Army Member.

It is my pleasant duty, in conclusion, to thank the members of the Reception Committee for their strenuous efforts to make the Conference a success. They have set up a standard which will be difficult for their successors to reach, much less to surpass. We look forward to the next Conference which is to be held in Calcutta when we hope to renew friendships and form new acquaintances.

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Printed by K. Mitra, at The Indian Press, Ltd., Allahabad

VOL. II

No. 3

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR:  
D. P. KHATTRY



MARCH, 1937

ALL-INDIA FEDERATION OF  
EDUCATIONAL ASSOCIATIONS

POST-BOX 52, CAWNPORE

PRICE ANNAS EIGHT

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## Editors' Note

The Editors will be glad to receive contributions on all matters educational and particularly invite for publication (a) authoritative articles on educational topics, (b) short articles dealing with educational research, (c) accounts of educational experiments, (d) articles containing statistics and their application to the solution of educational problems; (e) short notices of original works, (f) news of interest to educational workers.

All contributions should reach the Managing Editor five weeks before the beginning of the month in which publication is desired and should be addressed to Post-Box 52, Cawnpore.

friendly greeting to his mother tongue from the top of the University tower, and then followed it up, with cautious skill, by carving a channel below, through which the Bengali language could flow into its precincts. That channel has now been widened by his worthy son and successor, for which our present Vice-Chancellor deserves the blessings of his Mother-land.

For me, a writer in the vernacular, unpurified by the university rites of initiation, Sir Asutosh first broke one of its unwritten laws; and one more knot of their bonds has now been cut by his son in inviting me, that same academic outcaste, to address you in our own language. This shows that a veritable change of climate has come over our educational world in Bengal, and the dry branch that had withered at the wintry touch of Western influence, is now festively putting forth fresh foliage.

Elsewhere in India, another university has recently been seen to make the attempt to use as its medium of instruction the language if not of the people as a whole, at least of a considerable section of them, and its authorities have already achieved a marvellous success. This unexpected fulfilment of such hitherto unheard of idea, is doubtless for them a thing to glory in. But the present ambition of Calcutta University has for its larger objective the whole of its countrymen. Though some of the limbs of our Bengali speaking province have been cut as under by the hatchet of its rulers, this gesture of our University still amounts to proclaiming its recognition of the language of 50 millions as its own. By thus honouring its own country this University stands honoured. And to the memory of the great Sir Asutosh who heralded the advent of this auspicious day, I offer on behalf of us all our respectful salutation.

### The Protest from the East.

I am ware that latterly A BITTER PROTEST has gone forth from the Eastern world against the claim to greatness of European civilisation and culture. It is doubtless advancing at a great rate in the accumulation of material wealth, but the greatness of man is not in his outward possessions. The greed, rapacity and political trickery that emanate from the Western powers ruthlessly to trample under foot the rights of weaker countries, have never before in the history of man, been seen in such fearsome shape. Man has never been able in the past to give his unbridled passions such monstrous proportions, such skilful, undefeatable efficiency. That has become possible for the West today because of its command of science.

menacing shape, polluting the very source of our well being. The solution of these problems may not be easy, but if not found, we shall descend lower and lower into the abyss.

There was a time when culture, fellow feeling and prosperity reigned in our villages. Go to them now and you will see the FANG MARKS OF THE REPTILE OF DISSOLUTION that bestrides them. Pestilential maladies born of poverty, of physical and mental starvation, are eating away their vitality. It is for us ourselves to think out where the remedy lies,—but not by means of ignorant imaginings, not by dint of tearful outbursts. Defeated you may be, but you must vow that defeat shall not come by your deserting the helm in fright, or because you foolishly deem it glorious to commit suicide by jumping into the raging waves.

We are too readily inclined to be sentimental. We cannot arrive at the determination to pursue our endeavour with steady dispassion. Take up your country's burden manfully, in the light of your own intelligence freed from the vagueness of unrealities facing and knowing the folly, the ugliness, the imperfections that beset you for what they really are, not exaggerating them according to your particular bias. Where in fact our fate is every day insulting us, depriving us, hampering us, at every turn,—there to delude ourselves with home made claims to superiority, is one of the worst symptoms of our feebleness of character.

If you would truly set to work, you must begin by realising that the seeds of our downfall are within us, deeply imbedded in our character, our society, our habits, our unreasoning prejudices. Whenever I see our people seeking to throw the responsibility for our evil lot on some outside circumstance, to lay the blame for our ill success solely on the enmity of some alien party, to remain content with shouting their complaints into the unresponsive void, my heart cries out, as did old King Dhritarashtra: "Then do I despair of victory?"

The day has come for us to sally forth against our internal enemies, to deliver a massed attack on the age old follies that are the real roots of our misfortune. We must raise our own powers out of the slough of *tamasika* inertness into which they have fallen, and then only can we hope to make honourable peace with the power of our opponents, otherwise, any truce that we may patch up will be one in which we are bound hand and foot in the chains of beggary and indebtedness. We can only rouse the best in others by means of the best in ourselves, and in this best will lie the welfare of both. Full of holes are the vessels into



which are cast the reluctant doles granted to the prayers of the weak; of quicksand is the foundation on which rest the favours so obtained.

Let honour come to me from Thee  
Through a call to some desperate task  
In the pride of poignant suffering.  
Lull me not into languid dreams.  
Shake me out of this cringing to the dust,  
Out of the unreason that bends our dignity down  
Make futile our destiny;  
Out of the fetters that shackle our mind,  
Under the indiscriminate feet of dictators,  
Shatter this age-long shame of ours and raise our head  
    Into the boundless sky,  
    Into the generous light,  
    Into the air of freedom.

# PRESENT SCIENTIFIC KNOWLEDGE AND EDUCATION

BY

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*(Extracts from an Address delivered at a meeting of Higher  
Education members of The National Union  
of Teachers, England)*

England will be a really civilised country when the school teacher enjoys the prestige now allotted to generals, films stars, and newspaper proprietors. If you wish to achieve this, two reforms are urgent. One is to get more teachers elected to Parliament. The other is the abolition of morning prayers. The daily accompaniments of school assembly and the annual ritual of prize giving give head teachers the maximum temptation and the maximum opportunity for exercising a form of self indulgence which normal people secretly despise. When pressing social needs demand concise and vigorous statement, the teacher is therefore liable to carry his aptitude for ambiguous and sentimental exhortation into public affairs. So he (or she) becomes identified with sanctimonious earnestness about trivial matters and vague broadmindedness on decisive issues.

## Does "The European Spirit" Mean Anything?

An illustration is contained in the recent Interim Report of the Science Masters Association on the teaching of General Science. The Committee recommend the place of science in the cultural curriculum because no one "can now be considered truly cultured, no one can be considered as having felt the European spirit at its best, if he has never had his imagination stirred by that great adventure of ideas on which we are engaged the scientific exploration of natural phenomena."

Ever since the Reformation we have sterilised the teaching of mathematics by adopting Plato's plea for the pursuit of geometry as an aid to spiritual refinement. The world now stands in need of another reformation, and the Committee proposes to sterilise the teaching of science by using it to cultivate the

European spirit. As a plain citizen I must confess that I do not know what the European spirit is, and I am not very excited about the prospect of finding out. I do know what are the outstanding achievements of civilisation in modern Europe and modern America, and I do know something about how these achievements have affected and have been affected by scientific discoveries. If that is what the Committee are talking about they should say so, and if I have misinterpreted them they have only themselves to thank. If they wish to convert me they cannot expect me to penetrate a smoke screen of earnest and equivocal phrase making. It is their business to state a plain case in terms which I, as a plain citizen, can understand. As a plain citizen with no interest in watching the antics of the European spirit in the nebulous realm of ideas, the claims of science in education seem to me to rest on very simple and impelling considerations which are easy to grasp and easy to state, if your powers of lucid exposition have not been permanently impaired by usurping the curate's function. In three sentences they are these. The scientific knowledge which is now at the disposal of civilisation in modern Europe and America could rid us of war, poverty, and disease. If European civilisation does not use science to rid itself of them war will probably destroy our Anglo-American civilisation and destroy it irreparably. Knowing how science can be used to advance civilised living and knowing how it may be misused to destroy European civilisation is therefore necessary and useful knowledge for a citizen to possess.

The special characteristic which distinguishes modern civilisation is the extent of its dependence on an organised body of scientific knowledge. The potential of social welfare is vastly greater than it has ever been; and rational organisation of technical knowledge which private enterprise has failed to exploit could now guarantee health, leisure, and comfort for all. The potential of sheer destruction is also vastly greater than it has ever been; and it is difficult to imagine what could survive the wreckage of another world war. If greater poverty has existed in the past, there has never been a greater gulf between the poverty which exists and the plenty which lies within reach. If there have always been wars and rumours of wars, there has never been the possibility of such material havoc and cultural disintegration. This being so, there has never been a greater need of intelligent understanding of the social forces which will decide the fate of Western civilisation, and intelligent understanding implies some knowledge of the new powers which science has placed at our disposal.

## As useless as Greek

We have not yet orientated our ideas about education to the needs of a society in which every citizen is expected to make a pretence of performing useful work and every citizen is entitled to a minimum of leisure guaranteed by law. When we wish to press the cultural claims of science our first anxiety is to prove that it is just as useless as Greek or theology. By doing so we feel ourselves to be members of a leisured class. So it is very easy to succumb to the temptation. The strength of it is attested by the popularity of A. S. Neil, and others who believe that children should decide for themselves what is good for them. Since few healthy children would choose most studies prescribed by the existing syllabuses for examinations the results are what might be expected. The teacher, like the child, becomes a member of a leisured class. Handicrafts divorced from brain work replaces braincraft divorced from handwork. So we continue to produce citizens with no provision of the constructive possibilities which lies within reach or power to surmount the new perils which be-tet us.

## How Educational Reforms come about

Great educational reforms are only brought about in response to pressing social needs. In periods when great educational reforms are carried through, those who accomplish them, are not afraid to call what they want, useful knowledge, or afraid of stating the only rational arguments for their claims, because they would be called tendentious if they did so. If you had asked John Knox why he encouraged classical scholarship, he would not have told you that Greek is worth studying for its own sake. He would not have told you that Greek is a good training for the mind. He would have taken it for granted that education was part of the business of founding the Kingdom of God in Edinburgh. Founding the Kingdom of God then meant, among other things, bringing the Bible to the common people and scouring the earliest authentic texts for evidence of Popish innovations.

If we are to give science its rightful place in the education of a citizen we must abandon earnest trivialities about the European spirit and state its claims with the moral vigour of John Knox and a corresponding relevance to the conditions of our own time. The social task of modern education is not to found the Kingdom of God in Edinburgh. It is to implement the age of plenty. To do it we have to make the record of

scientific discovery an open bible. Only when we have stated our aim in terms which are socially relevant to our age shall we find any basis for agreement about a curriculum.

Discussions about the contents of a curriculum of general science generally end in the same deadlock. Each expert wishes to see that his own special province is fairly represented and each expert has his own views about what are and what are not important principles of science. If you start with a plainly stated social objective there is little room for disagreement on what is important and what is not important. Principles of science are more or less important because they have affected the social practice of mankind directly or indirectly to a greater or less extent.

For instance, the principle of self-induction is important because we would not have had transatlantic cables without it. The principle of the pendulum is important because of its pivotal importance in the romance of the clock.

### **A Course in General Science.**

A course in general science designed to meet the needs of citizenship must reinstate confidence in the human reason, reinforce constructive social effort, and give the citizen of to-morrow a vision of what human life could be if the treasury of scientific knowledge were dedicated to the satisfaction of common human needs. If it is to do this we must lay aside our preoccupations as specialists and find a common ground of agreement in our common needs as citizens. Recognising that the treasure of Athena is not for the building of the Parthenon, that the Sabbath was made for man and not man for the Sabbath, we must ask ourselves how the great constructive achievements of mankind each demands its special foundation of theoretical knowledge, and how the circumstances of man's social life have conspired to advance theoretical knowledge or hinder its useful application. The present divisions between specialist disciplines would then disappear against a background of man's developing social needs.

We should start naturally with man's first great cultural task, the construction of a calendar to regulate the seasonal pursuits of settled agriculture in the dawn of city life. We should see it giving birth to a map of the heavens and learn how the needs of navigation adapted the principles of calendar practice to the survey of the habitable globe. We should discover new needs imposed on the practice of time-keeping and navigation by the grey skies of a northern climate when the

Nordic savages were drawn into the pale of civilisation. We should learn how the study of motion became at once a possibility and a necessity where the sundial could no longer compete with the mechanical clock. Approaching the end of man's search by land and sea for the readymade bounties of Nature we should watch the new conception of a pure substance emerging from the search for material substitutes. We should trace the recognition of a third state of matter growing out of the practice of deep shaft mining in conditions of labour shortage and the exhausting of fuel supplied. We should see how the disappearance of slave labour quickened human ingenuity to devise new sources of power, and how the purchase of power demanded new principles of measurement for costing man's reserves of power. We should learn how the control of plagues and the exhaustion of the soil set man seeking for the knowledge which has doubled the expectation of life in two centuries and flooded modern commerce with a vast surplus of wheat.

If at each stage in the drama of human achievement we asked, 'Did this or that principle, this or that theory, help mankind to lift this or that stone in the building of the temple of plenty?', you who are a chemist could forget your personal enthusiasm for the mercaptan compounds and I who am a biologist could forget the fact that I am sometimes enthralled by the reproductive habits of the parasitic Hymenoptera.

### Examinations and the Teacher

However deplorable an examination syllabus may be, I believe that you get the best results by telling your pupils much more than they are expected to know. Of course I assume that the extra knowledge is of the sort which helps them to remember and grasp what they are expected to know. There is, after all, some comfort in this reflection. If it were otherwise cheap text books could replace good teachers, a ticket machine replace booking clerks, and unemployment in the education profession would rise rapidly.

Neither the exigencies of the examination system nor the vocational needs of the pupil who will eventually specialise in science would suffer if the social background of scientific discovery is emphasised.

The barren scholasticism of most elementary courses and syllabuses in mechanics draws attention to a criticism which is commonly, and in my view unfairly, made against examinations in science. In the words of a report circulated at this conference 'an examination in general elementary science should aim at

testing knowledge and appreciation of general principles. The fashion of saying that children should not be crammed with facts have very grave dangers. Comprehensive general principles emerge from a comprehensive survey of facts, and one way of deciding whether an individual understands a principle is whether it enables him to recall facts which are easily forgotten unless their significance is grasped. Too great insistence on memory work may well have its perils. In my view a far greater one in teaching science is the presentation of principles without regard to a sufficient background of relevant facts.

Blind worship of principle is the negation of science. Science is the unity of theory and practice, and excessive intellectualism is a far greater peril to science than excessive cramming with facts. At the school certificate stage an examination based on a much wider factual knowledge of electrical and magnetic phenomena would be more useful to the child who will pursue no further study in the subject. What is called "teaching the principles of electricity and magnetism" means teaching principles that have no relevance to facts of which the child has experience and illustrating them by facts which do not help the child to understand how discoveries are really made. Consequently it is equally bad for the child who is going to continue his studies.

### **Vast Usefulness of the Cinema.**

Of course the experienced teacher knows that a little play with plasticine and knitting needles will often surmount the first difficulties of visualisation of this level. What the model does for the three-dimensional object the cinema would do for the four-dimensional process. Simple harmonic motion, the precession of the equinoxes, the relation of celestial and terrestrial co-ordinates of a star, wave motions, the trajectory of a body projected in space are themes which present insuperable difficulties to a large number of people. They bristle with problems for the teacher, even if he only has to deal with pupils who have a tolerable aptitude for naturalistic studies. With all the resources of stereoscopic cinematography, I believe that a few hours would suffice to overcome visual difficulties which now defeat the ingenuity of the teacher and at best absorb weeks and months of time and effort.

Bacon said that it is unwise to exalt the powers of the human mind when we should seek out its true helps. There are many to-day who would have us exalt the minds of leaders with supposedly superior gifts. The task of educationists must be to emphasise the new helps which science has brought to the

understanding of the common man. Distrust of education and a pessimistic attitude towards the powers of the average citizen in our generation are the seeds of Fascism and war. If the cost of one cruiser were applied to providing projectors for our schools and the expense of two battleships were devoted to the production of films for the teaching of science this generation could witness a greater advance of human enlightenment than the world has yet seen. This is rational ground for hopefulness in the dark hours through which Europe is now passing.

—THE SCHOOLMASTER AND WOMAN TEACHER'S  
CHRONICLE, LONDON



## EDUCATION OF THE INDIAN ARISTOCRACY

BY

RAO-BAHADUR SARDAR M. V. KIBE. M. A., INDORE.

The Indian culture is clearly characterised by gradation, not only outwardly but inwardly, each individual according to his capacity. This shows a great understanding of psychology. Other influences due to human weakness have led to its deterioration, which has produced not only unseen but sometimes undesirable results.

In education, the Indian system was based on two principles. One was the production of an aristocracy of intellect and the other, the spread of knowledge among the masses. The duty of doing the latter was laid on the former. It was again specialised according to the three inherent qualities of human nature and their combinations. The Indian psychologists have held that the human mind is subject to three influences:—*Satwa*, *Rajas* and *Tamas*. The first one denotes the perfection of the human mind, the second a quality useful for worldly behaviour and the last one is to fit one for the most subordinate class.

In the aristocracy of intellect, the first governed the highest class and so on, till the fourth class was reached. The two middle classes combined the first and the second and the first and the third respectively predominated in the first and third class.

The first class represented the aristocracy of intellect and the rest required as much general knowledge as was necessary for their well-being. It was laid as a duty on the other classes to support the former so as to make them care-free and leave them ample time to promote the intellectual well-being of the people by specialisation, meditation and experiments. The knowledge which they thus acquired and discovered was distributed by means of popular treatises, such as *Itihas*, *Puianas* and *Grihya Sutras*. It took centuries to produce the aristocracy of intellect.

This system of ancient India was dismembered by foreign invasions. The invaders, whose culture had not attained the standard of the invaded, recognised no innate differences in

human nature. Religion to them was the one thing that was to be universally enforced, so also were mundane matters. An individual was to find his own level. Owing to necessity, to worldly reasons and to compulsion in spiritual matters, the finely created system of the former times received a rude shock. It tried to strengthen itself by contraction and rigidity in its rules of conduct, but a pretty large portion submitted to the new order of things. The resistance offered by the majority kept alive its culture, although it lost its energy and became petrified. But so far as the social culture was concerned, the ideas of education became secular. The bulk of the population did not succumb to religious influences, it only acquired efficiency in the secular side of the foreign culture.

The break up of the Indian system was not bridged by the new regime established after the British conquest, in spite of the religious neutrality and the enforcement of the ancient laws in the matter of inheritance and succession by the new government. For a time the only education, which was undertaken by the government for its own purposes, prevailed. It was uniformly applied and it completely ignored the rules of psychology. It made a foreign tongue the medium of education, completely ignoring the culture of the land. A glaring example of this tendency is the teaching of western psychology, in place of the Indian one, in spite of its superiority. Such was the influence of the new order of things that even the Indian States followed suit. It was only in comparatively recent times that mainly under the influence and guidance of Swami Dayanand attempts to educate on older lines were made. Although with the manifestation of the limitations of the new methods of instruction, the last named attempts are multiplying, even in the Universities which are under the control of the British Government, and the Indian languages are being given their due place as the medium of instruction, though its pace is extremely slow and marked by a curious caution.

Unlike the ancient ideal, the new ideal of education aims at universality and uniformity. However successful in its deadly effect it may have been under the second head, the former has its limitation—finance, man power, economic conditions and such other handicaps against it. Thus having destroyed the aristocracy of intellect, it has not succeeded in its universality. The percentage of literates in India, in spite of more than a century since the introduction of the new order of things, is extremely low, barring a few exceptions in certain parts of the country.

The new education has thus worked against nature which in fact has made it so costly and abortive. In other countries there did not exist the peculiar features to be found in India. For example, there did not exist in them the distinction in the layers of society based on the psychology of human mind as was the case in India. Nature, whether in India or outside, must assert itself and if there is not that extreme form of caste distinction there is, unless forcibly suppressed for a time, as in Russia, the class distinction and the hold of certain moral ideas. In India the principle of heredity was given too much importance and the necessity of contraction for self-preservation which arose, made it supreme. But in normal times, however strong the hold of preservation may be, it cannot remain unbreached for a long time and must in the long run give way.

Education in its etymological meaning recognises grades of mind; instruction can be uniformly prescribed, but it must take account of the force of the former. When that is lost sight of, as in the hurry to turn out human machines for service, the intellectual growth, as well as the instruments for imparting the same are stunted.

In India the aristocracy of wealth was never given the first place; it was taken by the aristocracy of intellect. Wanting in worldly possessions, it was given the highest place in society. If both combined, as was the aim of education, the result was hailed with delight and received greater honours than in one case only.

The question for consideration now is whether aristocracy is to remain or perish. The world forces are against the aristocracy of wealth, whether of a hereditary nature or not. Even power is dependent upon political circumstances. The only aristocracy that will survive is the aristocracy of intellect. True education then must lead to its promotion. Neither heredity should offer any advantages, nor should poverty put obstacles in the way. This should be the test of imparting true education.

Viewed from this standard not only specialisation in subjects, but in methods also, seems imperatively called for. There is a tendency to decry special institutions for special classes. This seems to be unaccountable when it is recognised that what is sauce for the goose is not the sauce for the gander. The outlook, the equipment, and the needs of the different classes require special training. It is possible to begin specialisation at an elementary stage, but it is not desirable. Up to a certain level the kind of education cannot but be the same but what may be

an auxiliary to a wealthy person, it would probably be the means of livelihood to a man placed in a different strata of economic conditions. Naturally the emphasis on the subject in these two cases will be different.

The aristocracy of wealth, especially a hereditary one, has special rights and duties. It has many natural advantages which, if not utilised, are more harmful than even wasteful. The resulting energy should be directed into proper channels.

Just as it will be a mistake to stifle the superior individual intellect in order to make it go in with the common herd, so also to nullify the advantages possessed by the aristocracy of wealth by disuse will be criminal, because suicidal. To take an example, the knowledge of geography cannot be complete without travel but because many cannot avail themselves of it, the necessity of travel has been lost sight of. Travel to complete education was an ideal to be aimed at but by disuse it has lost its place of pride. The performance of pilgrimages was enjoined by religions to make a complete or perfect man.

It is fashionable to say that in the race of life, none should have handicaps, all must rough it out in the field of competition. But this can only be achieved at the cost of peculiarities produced by centuries of civilisation for the benefit of the mankind as a whole. It will be unwise to allow them to become atrophied or perish in the long run.

Moreover nature will always assert itself and produce superior species and more nearly so, provided it found a favourable environment, either natural or artificial. Heredity may fail in many cases, yet in some cases it will assert itself. So why lose its advantage. Where it fails, undue emphasis should not be laid on it, as there is the natural tendency. It should be discouraged. But proper emphasis on it cannot but be useful.

All these considerations make the practical problem of education more difficult than what it is. But one thing clearly emerges that special environments, which can be available in special institutions, are a necessity for preserving and flourishing what is best in a State.

The formation of character, and not so much the storing of learning, is the main function of education. The latter is simply a means to an end. In laying down the foundations and raising its structure, environment has the predominant influence, although heredity and instruction also count to some extent.

The postgraduate department caters for the aristocracy of intellect. A similar special provision is required for the aristocracy of birth or even of wealth.

Poverty should not be allowed to suppress intellect. It should be the look-out of the State. But it is not always easy to detect intelligence. Tests are equally required for it.

Observers have remarked that there is no difference between the nature of instruction and quality of education given in England and India, except what is due to the difference in environment, such, for instance, as the necessity of studying a foreign language as a medium of instruction and the assimilating of knowledge foreign in presentation. As in many other things so in education Englishmen have copied in India what they had in England. There is however more variety in methods and manner in the latter country than in the former.

India is awakening to the need of variety and of making the country not only self-sufficient but original in the field of instruction, education and knowledge. In the modern levelling tendencies, the merits of the specialised education in the case of the aristocracy of birth and wealth run the risk of being forgotten.

Spread knowledge and its patent means, literally as widely as possible. But what is also equally necessary is variety in education and in the means by which it is imparted. The rise of public schools in India is a welcome sign. It is meet that it has followed in the wake of the provision of post-graduate studies.

What the aristocracy requires are variety in education and the places where it is imparted. This claim is the main stay of its existence.

# NATIONAL PHYSIQUE AND EDUCATION

BY

JOHN MACKIE M A , D SC , F R S E , R E C T O R , L E I T H A C A D E M Y

*(Address delivered at the Annual Congress of the Educational Institute of Scotland at Edinburgh)*

Let me say at the outset that I am fully in sympathy with giving attention to bodily welfare its proper place in education. There is no question of denying the value of physical training in a curriculum. I have recently, in the absence of my gymnastic teacher, been deprived of the services of a trained instructor, but with the aid of the men on my staff I have arranged that the boys have continued to receive their regular periods in the gymnasium. And when I tell you that I have even taken some of the lessons myself, you will admit, I hope, that if I am critical to day it is not because I am unaware of, or underestimate, the benefits from gymnastics.

## Are We a C3 Nation?

The present widespread interest in the subject appears to have arisen from the belief that the physical condition of our people is unsatisfactory. That master of picturesque phraseology, Mr Lloyd George, spoke of a C3 nation, and we have never got over it. But picturesque phrases are not of sufficient ground for action. Mr Lloyd George did not always act on them himself. I should like to examine for a little this assertion that as a nation we are in a bad way physically, for I do not think that it has been well made out.

On what evidence is the statement made? First, a large number of would be recruits are rejected by the Army on physical grounds. It is well known that the less well endowed, mentally and physically, tend to become unemployed, not because there are no jobs they could do satisfactorily, but because at each stage they are edged out of the competition by their more able fellows. Among the younger unemployed there is a larger share of those less well endowed persons than there is in the general community. Again, as has always been the case, a considerable number of those who seek to join the Army do so because they have no other job. Hence the Army recruits are not a fair sample of the population. The proportion that falls below the Army standard

must be much less throughout the people generally than it is among the recruits.

We are next entitled to ask whether the Army standard need be accepted as the standard at which the whole population must aim. The work of an Army, especially in foreign climates or on active service, demands qualities of strength, robust health, and endurance, of a high order: qualities that can be conserved only by unremitting exercise and training. The Army demands, rightly, men specially well endowed with the physical qualities necessary to a soldier's life. But it is not reasonable to set up the Army standard as one to which we should all attain. A man quite unfit for soldiering may nevertheless live a long, healthy, useful, and not unhappy, life in a less physically active sphere. After all, the physical excellence we require when selecting members of an Arctic Expedition is not necessary when we are electing a Kirk Session. As a writer (a doctor, be it noted) to the *Scotsman* said: "Many of the world's greatest thinkers have had the worst of health—only they had the pluck to stand up against it. I am not suggesting that physical health is not desirable, but the importance of bulging muscles and square shoulders has been greatly exaggerated."

The evidence from the Army that we are a C3 nation must be largely discounted, first because it is actually misleading, and secondly because the Army standard is higher than can or should be expected from everybody.

A second line of evidence comes from statistics. It has been said that in ten years, from 1922 to 1932, the time lost through sickness per average insured man more than doubled. Now is anyone likely to believe that the amount of ill-health in the country actually increased as much as this without so remarkable a fact forcing itself on public attention? The experience of Friendly Societies, I understand, shows that when unemployment is prevalent the claims for sick benefit increase. Ailments that in prosperous times would be ignored are made the basis of claims for benefit. In fact, statistics of sick benefits are very untrustworthy as an index of the amount of illness apart from a careful study of many other social factors. It may well be, of course, that there was actually an increase of illness, but it could not be due to lack of physical training, which was not neglected between 1922 and 1932, but must have been due to other social causes in that decade.

Another statement is that illness is costing the country £25,000,000 a year. This is a sorry argument, and it is significant that it should be thought likely to carry weight. I

the boys was very high. The personal level was, of course, the most important, and in that respect there was hardly a boy who did not stand very high, and he could name at least several scores of boys who, excelling in work, sport, and refinement, were the model of what youth at its best could be." It is quite clear from this that in the Merchant Company's schools we shall not find 67 per cent of unfit youths; and that is because their parents are well enough off to provide their children with those essentials of nourishment and comfort that are the fundamental conditions of good health. What is wanted, in fact, is more wealth among the poorer classes. Raising what is called the standard of living carries with it raising the standard of health.

This need for good nourishment as against physical training has been, somewhat grudgingly, admitted. But recently it has been brought forward that the question of food is of minor importance. It has been opportunely discovered that the Germans are nearly all healthy in spite of poor and insufficient food. It is not more money that is needed, it is said, but wise spending, not more food, but food better chosen. No doubt we shall hear again of the virtues of lentil soup and those other articles of diet that people are fond of advising other people to eat. Certainly there are foods that are both wholesome and cheap, but there are others that are wholesome and dear. The apple a day that keeps the doctor away costs a tidy sum for a family in the course of a year. As for the ill-fed Germans, whose rulers have given the watchword, "Guns instead of butter," it would be interesting to hear their free and uncensored thoughts on the matter. The question of nourishment cannot be evaded in this way; and it would be better frankly to recognise that poor physique is largely due to poverty.

Secondly, many children have not places to play in. There should be not only fields for organised games, but places where the children may play freely, may run and shout, may be, not only footballers and cricketers, but robbers and Red Indians if they are so inclined. The prophet saw in his vision of the restored Jerusalem "the streets of the city shall be full of boys and girls playing in the streets thereof." The street is the perennial playground, but it is no longer always safe: and I would put in a plea for streets or street-like places where the children could play safely near their homes.

A third cause of ill-health is want of happiness. I am not referring to isolated instances of individual unhappiness, but to that almost universal unhappiness, anxiety, and almost despair, which is afflicting the modern world. The fear of war, the talk



## How a Child Spends His Time.

To see whether an undue time is spent in study, I have tried to estimate how a child of about twelve to fourteen spends the week. Let us suppose that he sleeps ten hours a day. This may include, if you like, the time occupied in persuading him to go to bed. He is at school five hours and a half, and his home work will take, let us say, an hour and a half on each of five days. Meals and the dinner interval will account for two hours, and dressing an hour. He will be running about playing for two hours, reading or working at some game or hobby for an hour, leaving him an hour to waste; for children waste very little time. This gives us, as a rough estimate for a week, the following:—

Mental work . . . . .	33½	hours.
Physical training and games . . . . .	4½	..
Playing . . . . .	10	..
Meals and resting . . . . .	12	..
Dressing . . . . .	7	..
Hobbies, etc. . . . .	5	..
Wasted . . . . .	5	..
....	<hr/>	
	77	..
Sleeping . . . . .	70	..
....	<hr/>	
	147	..
Unaccounted for on Saturday and Sunday . . . . .	21	..
	<hr/>	
	168	..

Out of 98 waking hours  $33\frac{1}{2}$  are spent in mental work, and I suggest that this fraction is not too large to devote to training the mind and cultivating the intelligence. When it is further borne in mind that school is open 40 weeks in a year, and that home work is lightened and even cut out at certain times, it appears that between a quarter and one-fifth of a child's waking time is occupied in study. We may carry too far the process of cutting down the time devoted to the mind. As for exercise, he spends (assuming that he has a suitable place to play in) about 20 hours in active and health-giving training or play; and of this some six or seven may be spent in the gymnasium, in practice-games, and in Saturday matches. There is little ground for thinking that the time already given to physical training and sport is inadequate.

My own feeling is that at present the pupils have adequate time for exercising their bodies: that some of them have also

Ten years ago, even five years ago, the national ideals regarding education were very high. Speakers and writers, men directly concerned with education and others with a vision of a glorious future for the nation, all were advocating educational aims and ideals of the loftiest kind. The golden age seemed in prospect. I remember particularly a broadcast address by Professor John Macmurray on "Learning to Live," in which he spoke of the value of knowledge, of training the body in fine and free action, of training the senses to see, hear and feel, to touch and handle, finely, of training the emotional life and the religious life, which last he considered the central point. Such ideals had not only the support of the leaders of national thought but the blessing of men in authority; and teachers must have felt a glow of anticipation that they were to take part in a noble work, a veritable renaissance. These fine ideals now appear to be in jeopardy. Doubts are cast on the need of as many highly educated people as we can get: the value of knowledge is being again assessed in terms of the requirements of industry: and now the possession of animal strength and robust bodily health is being held up as almost the highest good to which man can attain. Some time ago a speaker said that man's first duty was to be a healthy animal. This is a sad downfall for Scotsmen, for did they not use to teach us, "Man's chief end is to glorify God?" Stands Scotland where it did? I plead earnestly with my fellow-teachers to resist any lowering of the ideals inspiring the work to which we have set our hands. I plead for proclaiming anew that our chief business is, and remains, with that part of man that distinguishes him from the lower animals, and our chief duty to develop those higher powers to enable him to live the fullest life of which he is capable.

### Fear of Militarism.

It is formally denied that the movement for physical fitness has any militaristic aim. I am glad of that, and we should make a note of it. But if the contrary impression has got about, the supporters of the movement have themselves to thank for it. How often have we had foreign nations whose aim is frankly militaristic held up to us as examples and compared with us to our detriment? One lady, writing from a Highland manse, would like to see teachers leading marching platoons of children round the countryside. It is this willingness to march that is one of the curses of the world. A public man says that children would not dare to do this thing and that thing in Germany. I dare say not. The Moderator of the Church of Scotland says

that out of 15 Scottish adolescents five are fit, whereas out of 15 German adolescents 12 are fit. He did not say what they were fit for. If he had counted the men of good will, and numbered those who deal justly and love mercy, he might have found the proportions reversed. Frankly, I am not sure there is no cause for suspicion. The writer of the "London Letter" in the *Scottish Educational Journal*, who has always something worth while to say, appears to share these suspicions, but welcomes the interest in bodily welfare, and says he does not care what the motive is. For my part, I do care, for I believe that in education the spirit in which we do a thing, and the motive that actuates us, are all important. That those who fear the Greeks even when they are bringing gifts are not unjustified is shown by the alacrity to open the door a little and the anxiety to show us that the horse does not contain armed men.

### Intelligence the Main Concern of the School.

I have tried in this paper to show, first, that the physical condition of our people is not so bad as has been asserted, and second, that much of the ill health, whose existence everyone recognises and deplors, is due to great and wide-spread causes that are beyond the control and outside the province of the school. I have given a word of warning about this mass movement, lest, when Father says "Turn," we all turn without seeing whether Father is going to fall out. We must see that we do not suffer our high educational aims to be forgotten or obscured. The training of the new generation is a complex task, and to hand on the experience of the race calls for a variety of services. At one end the public health authorities and the doctors have the care of the body. Professor Lelean is doing his job when he urges the importance of good health. At the other end is the Church and its ministers, whose special province is to see to the moral and religious part of the training, it is a task they should be proud to do, for theirs is the right of the line. In between are the schools and the teachers, paying attention on the one hand to the care of the body, and recognising on the other their share in developing good character, but giving their main attention and their keenest thought to the training of the mind and the cultivation of intelligence. It is only when we all realise the importance of every aspect of training, and do to our utmost our peculiar part of it, that we can hope to produce a race noble in reason, in action like an angel, in apprehension like a god.

## ABDICATION

BY

H. D. W.

(By the courtesy of Principal K. S. Vakil).

We Are Sad, Sir, it is hard to say ' Good-bye,'  
 We gave you service of our very best ;  
 Love that for some was near idolatry  
 And loyalty by high and low confessed.

And you were worthy--so we fondly thought--  
 You stood for brotherhood and peace from  
 strife,  
 You hated shams and cared for men who fought  
 The losing battles of a cheerless life.

Custom, convention tied your eager hands,  
Yet you contrived some light and hope to  
bring.

‘Here is a man,’ we said, ‘who understands,  
‘Him can we honour, him revere as King.’

And now you leave us: There have come  
  between  
Shadows and doubts and warring loyalties.  
The dreams are gone of all that might have  
  been,  
On that lone head the Crown too heavy lies.

Not ours to judge; nay, rather do we pray  
 New happiness be yours where'er you dwell,  
 For your last words we thank you ; they shall stay  
 Deep in our hearts for ever. Fare you well.

[FROM "THE WORLD'S CHILDREN," JANUARY, 1937]

## REORGANISATION OF WOMEN'S SECONDARY EDUCATION

BY

MRS K M GEORGE,

*Inspectress of Schools, Trichur*

That there is something seriously wrong with the present system of girls' education almost all are agreed. But few, whether laymen or experts, are agreed as to the method of remedying the defect. The diagnosis seems to be more or less similar, but the remedies suggested often do not meet with general approval. There is nothing surprising about this, for when one studies deeply the question as it confronts one in India, one is faced with the vast difference that exists in the various provinces in social conditions, in economic status, in intellectual advancement and in cultural levels. The problem of boys' education is difficult enough demanding the thought and attention of the leaders of the land. That of girls is infinitely more so.

The problem of women's education in India has assumed special importance and urgency, because of the changes that have been taking place in the attitude towards women's activities. It is being realised and admitted more and more, even by the conservative section of Indian opinion, that women have a very big part to play in the present and future development of India. While there is unanimity on this point differences begin to appear as soon as one tries to give this a definite setting, as soon as one tries to translate this vague and widely diffused idea into concrete form. Two main schools of thought—and there are many differences in degrees even among these two broad schools—may be distinguished. There are those who advocate an identical course of study for boys and for girls. They argue that during the stage of secondary education it would be premature and wasteful to introduce any differences in the curricula of studies based on sex. There may be a few extra subjects taught to the girls. The boys also may be given some kind of training in certain subjects which are not so much suited to the genius of girls. Perhaps if any such division is to be introduced in the syllabus that may be tried at the University stage.

On the other hand, there are those who hold with equal force and plausibility that the nature of boys and girls are fundamentally different. Their functions in life, the duties they are expected to perform are not the same. Hence the system of education that might prove quite suitable for boys would break down when applied to girls in the secondary or college stage. It appears to me that such a clear and fundamental differentiation between the duties of boys and of girls and their mutual relationships, is altogether misleading, if not mischievous.

While there may be certain special aptitudes and duties and functions in the case of men and women, the things which they have to understand, experience, and observe in common are many. In the big sphere of life, men and women do not move in concentric circles. Their interests, activities, emotions and aspirations cut across each other. Life does not admit of any such easy and convenient divisions, and modern tendencies are trying to reduce these differences in certain directions, while at the same time, they are being emphasised in others.

It is true that there are physiological differences between boys and girls which have their reactions on the physical and intellectual developments. But it is not necessary to over-emphasise them in a course of study. Such differences imposed by Nature have to be taken into account, no doubt, but man-made conventions should not in any way accentuate them, render them more morbidly conspicuous than they are; nor should we fail to take note of their existence.

A liberal system of secondary education for girls and for boys should be such as to give them as much as they could usefully assimilate in the course of five or six years. The general and literary education should be organised and conducted in a manner that would enable them to continue their education through life, even after leaving school. The emphasis is more on the mental attitude that is created than on the actual stock of information they have been able to gather. By the time the boys and girls leave school, they should have succeeded in fashioning for themselves strong and attractive mental pegs on which they could hang their ideas. Their minds should be like a well-laid out garden which they could later on improve and beautify by proper care. Instead of that, what one actually finds is that some of the fine plants are soon choked by the weeds that are allowed to grow fast by neglect. In this matter both the education of boys and girls may be said to suffer in India. While a certain amount of wastage is unavoidable under the circumstances, with a well-thought-out plan of education which reconciles the demands of

the body and the mind of the girl with the social and political conditions around her, this wastage can be reduced to the minimum

That raises the question of a proper curriculum of studies for boys and girls. A system of education which aims at developing the mind, must include a study of Languages, of Mathematics, Elementary Science, History, Geography and of Civics. The present system of education, no doubt, provides for all of these, in some form or other. Changes and improvements seem to be necessary more in the quality and methods of teaching, than in the actual fare provided to the students. The ingredients of the educational dish are all right. They may be found in all the different provinces to be somewhat similar. But the manner in which the actual preparation takes place, and the way in which they are served out, differ so widely. In some cases, they even spoil the beauty of the original materials.

In the case of secondary education for girls there is one factor which cannot be left out. Whether girls get married or whether they enter a profession, the main duty of keeping the home falls on the woman, and a preparation for home life and motherhood becomes imperative. Their education should be fashioned more in harmony with the domestic demands and conditions that are obtaining now. The present system lifts the girl out of the natural home setting, and leaves her suspended, as it were, in an artificial atmosphere which is the hybrid product of the class room town, or village atmosphere and the home! Hence the internal harmony necessary in the mental outlook and attitude of the girl is greatly lacking, just as there is a great conflict between the rural interests and the urban tastes and habits of boys. Such a conflict takes away greatly from the usefulness of the present system of education.

A greater emphasis on home science has become extremely urgent. Under Home Science should be included the art of dietetics, the study of child psychology, home nursing, besides the usual subjects of cookery, and needlework. All these are different arts in their own way, and they call for patient study and observation. The part that inborn genius or heaven sent intuition plays in this sphere of domestic life is very small, though some men foolishly imagine that the gods have favoured women with a generous measure of these qualities. The accumulated result of the ignorance of women, as well as of men in home science, is seen in the poor physique of the average Indian school boy or girl. It is pathetic, and the drawback is all the more glaring when compared to the splendid figure of boys and

girls in England and in America, full of vigour and vitality. This is as much the result of the care devoted by their parents, as of the medical advice and help rendered by public bodies and school authorities. Besides, great care is given to the diet of the child.

This aspect of the problem has been neglected in our country. Poverty is the usual plea put forward in this connection. But lack of sustained effort and planning are equally responsible. Now the Government and some of the Municipal bodies have begun to take the lead. We have yet to find out by constant experiments a system of dietetics, cheap and nourishing, varying in kind according to the climate, tastes and products of the different parts of India. Unless this subject is scientifically pursued there is little chance of any system of education succeeding to its fullest extent.

Home science need not be introduced as an additional item in the curriculum of studies for girls. While boys are given a more intensive manual training, the girls should be provided with instruction in the domestic sciences. The programme of work in this sphere should be so arranged that the interest is kept up from the period of entering school right down to the time of leaving it. The lighter subjects like needlework, cookery, hygiene, rules of health may be studied in the lower secondary classes. The higher forms may receive instruction in nursing, first-aid, child psychology and dietetics.

The question of physical culture for girls is one which demands greater thought and planning than given to it at present. This department is almost neglected in some schools, though it has a place in the scheme of studies. Perhaps, in some cases, it may not be a matter of lack of interest, as of lack of funds. For, the provision of proper play grounds and sports materials might make a heavy financial demand which the school budget may not be in a position to meet. But this neglect is certainly criminal. In the last Great War 30 men died out of 1000 combatants, whereas in India, out of every 1000 women 250 die of child-birth, and every one of our girls runs a far greater risk than the forced recruit. Unless this pitiable state of affairs is remedied by means of proper education in secondary schools our system shall ever remain condemned. A good body is as much necessary for the happiness and efficiency of the individual as a well cultivated mind. The Greek ideal of a fine body has yet to be consciously held up both among the boys and girls of India.

The art of decorating the home is one which is very badly neglected. It may be said that this is a thing which has to be



cultivated at home. There is some force in that too, I admit. In countries like Japan, it seems, this is a special art which the women of the house cultivate. Any visitor to Japan, it would appear, would be struck by the tidiness and attractiveness of the Japanese homes. Japan also is a poor country. So, the plea that she is a rich country and could therefore afford all such "luxuries" is meaningless. Our curriculum should attempt also the introduction of the art of home decoration.

This culture of the beautiful and the proper training of the emotions would partly save the present system of girls' education from the defect of being too theoretical and intellectual. An emphasis on fine art, a greater attention to music, painting, acting, gardening, and other kindred activities, would correct flaws in the education of girls. Some of these should find a place in the curriculum as optional subjects, while others according to the conditions existing in schools may be made compulsory.

The problem of the towns and villages in India, their sanitation, water supply, health, rates of mortality, etc., should be placed before girls by a well thought out system of education. Even if a girl or a woman finds it possible to introduce some sort of harmony in the domestic environment, unless there is an improvement in the conditions of the town or village in which her lot is cast, there will always be a jarring note. Elements of civics and sociology should come in the course of studies. It must lift girls from the narrow horizon of the home and make her interested in the wider problems of the village and town, and finally of the country at large. Since modern problems are becoming more and more world problems, secondary education will have to be so regulated that girls, naturally and without effort, may be enabled to play the part expected of them in their own homes, in the smaller unit of the town or village, and in the larger affairs of their country.

It is not my intention to present a set plan, hard and fast in its nature and implications. I have merely attempted a rough outline and the details will have to be filled in according to the special needs and demands of the different parts of the country. Matthew Arnold has aptly said that "the aim of education is to know ourselves and the world." The object of any scheme of education for girls as well as for boys, should be to fit them properly with as little friction as possible, with the different conditions of life in the world, in which they find themselves placed. This adaptability to the environment ought to be the supreme test.

## ART IN THE SCHOOLS

BY

ALFRED G. PELIKAN,

*Director of Milwaukee Art Institute.*

On many occasions I have heard the remark made by parents: "If I only could have had the opportunity to do the things which the children are able to do in school today—how much more I would have enjoyed school work."

It is to some extent due to this attitude on the part of parents that the study of art (which means drawing, painting, modelling, designing, and the crafts) is accepted in the schools today. There are many valuable educational outcomes which, of course, are important, but after all the very fact that children love to draw and are anxious for the opportunity to express themselves creatively, should be sufficient reason for the introduction of art in the school work.

Young children express themselves very often much more readily through their drawing than they do either in writing or in words. It is a means of ascertaining what goes on in the mind of the child, and offers an outlet for ideas which are expressed spontaneously and with a whole-heartedness that is surprising. It further offers to the child a period of relaxation from some of the other studies in which drills are necessary such as in number work and spelling.

The relaxation on the part of the pupil should not be regarded as wasted time, nor as a frill or a fad. It is not a period of inactivity, but a period of change of activity which helps to refresh the child and enables him to go back to his other studies with new enthusiasm and without undue strain, which may be imposed by too prolonged concentration on any subject which requires considerable effort on the part of the child. Strange as it may seem, the introduction into the curriculum of some of these cultural activities such as art, music, dramatics, etc., in no way retards the student in his academic studies. As a matter of fact, it has the opposite effect. The art work is used by many teachers as a means of establishing interest in other subjects; thus the study of history, geography, reading, social sciences, travel, etc., can become very real to the child when he is given an opportunity to dramatize some of the events through drawing

or through some other activity in which art plays an important part, such as the making of puppets, posters, and projects bearing directly on the subject under discussion.

In many instances the teachers themselves have taken the initiative to tie up this interest established in the art classes by working out problems in which not only the art will be important, but in which the learning process will be used to good advantage in connection with some other study. The illustrating of the story of the discovery of America by Columbus, the life of the Colonial settlers through a study of their quilts and architecture, the life of our neighbours in Mexico, portrayed pictorially, and many similar instances of correlation have been worked out most effectively by teachers in the various schools.

When it is realized that many of the children have little opportunity to come in contact with art and the finer things in life at home because of financial difficulties, when it is further recognized the great amount of happiness that children obtain through their art work in the schools and at the Art Institute, it can readily be seen how parents who wish their children to have opportunities which they themselves did not have, are whole heartedly in favor of giving their children a foundation of those things which will lead to greater enjoyment throughout their lives.

Anyone who has seen the thrill with which a student of a High School, for instance, views his first piece of pottery made entirely by his own hands, can realize what it means to a child to have the opportunity to express himself creatively. Other materials are used, such as leather, metal, wood, and dyes. The objects created by the students cannot be judged in terms of monetary value alone because that is secondary. The great value is in the fact that the boy or girl has created an object which requires skill and feeling, and which helps to develop a genuine appreciation for fine craftsmanship, and may also lead to a worthwhile leisure activity.

The play element which may be a great factor when properly directed assumes an important part in art, particularly in the kindergarten and the lower grades. Children at this age usually have vivid imaginations and live in a world of make believe. Things to them are as they imagine them to be, and where they fail to express their ideas verbally, they very often are able to record them through the medium of the brush or the crayon. Those children are closely akin to the creative artist in that they produce original drawings and look at art in an unprejudiced and wholesome manner. The sophistications which enter their

lives at a later period have not had an opportunity to influence them unduly, and their drawings, therefore, have a charm and sincerity which makes them admired by all those who have a genuine love for art. At this age little or no actual teaching is necessary because it is difficult, if not impossible, and certainly undesirable to try to impose adult standards on the child's mind. What to the adult may look very crude, has a different meaning to the child and may have greater artistic value than a mere photographic or realistic drawing which may show greater skill but less imagination.

Parents should recognize that this opportunity on the part of the child to exercise his God-given imagination is one of the best means to stimulate original ideas, and to help him put into action some of the things which transpire in his mind. The child becomes a creator who produces from within himself, not a listener or a passive being who merely absorbs what is drilled into him from without. Crude as the drawings may seem and lacking as they may be in technique, they have in them the nucleus of good art. Only later when the child begins to feel the need for greater skills and techniques is it advisable or necessary to more definitely control the work. Drawings should always, as far as possible, be the expression of the individual. They should differ from the work of other individuals, and should not be subject to any didactic rule or formula. The imagination should be given an opportunity to flower and to grow. Art should be a pleasant experience to the child if it is to be worthwhile. The aim throughout the schools in teaching art is not to make artists, but to make children sensitive to art, to make them more intelligent consumers with reference to art values, and to furnish them with experience which will enable them to turn to the arts for relief from the strain of the hurried and exacting tasks of life.

As the students become older and more curious, and imbued with the investigating or exploratory spirit, opportunities are offered to them to experiment with various tools and processes so that they may get a better idea of the skilled crafts through some actual experience. Often the finished products of their efforts are so well executed as to make them of real value.

In addition to participating in the active creative problems which require self-expression, there is also the larger field of general appreciation. Students may be made conscious of the value of our beautiful parks, fine public buildings, and our educational institutions such as museums and art galleries. They should be taught how to improve their own rooms, their homes,

gardens, and to recognize the importance of good taste in dress and in industrial designs.

Art is primarily for the purpose of enhancing and enriching our lives. Like music it is intended for pleasure, and should therefore not be regarded as either a frill or an extravagance. *Art is for the many and not for a few chosen ones.*

Beautiful cities and homes can result only when our young people have an understanding of the value of art as applied to our everyday lives. Life without the amenities becomes brutality. Counteracting influences are ever present to dull or deaden entirely the inherent, aesthetic tendencies, evidenced in children and primitive man. Unless provisions are made to offer to our young people opportunities to participate in those cultural activities which made Athens the admiration of the world, and which at the present time are needed more than ever, our country can never hope to have a culture of its own.

The value of art as an educational and cultural factor has been recognized by many leading educators in Europe and in America. Parents should also recognize that the art work furnishes an outlet for creative energy and should, therefore, encourage children to draw as much as possible, not with the idea that they become artists, but in order to develop such natural talent as they may have. With the younger children it is advisable not to criticize their work from the point of technique or accuracy, as this may discourage the children and make them self-conscious about their work. Art, like music, dancing, poetry, and the drama, are activities, the value of which cannot be measured in terms of monetary return. They help in the shaping of a well rounded life and in promoting good citizenship.

## STAFFING OF PRIMARY SCHOOLS

BY

M. R. PARANJPE,

*Poona.*

What sort of teacher do you choose? What a question! Of course we choose a qualified teacher, one who knows what he teaches and how to teach it. A good answer that and yet how often have we to ask that question to ourselves and accept a reply which is not the same as above. We do not always meet a teacher who knows the subject he is to teach and has acquired the necessary teaching technique. Not unoften do we come across one who knows his subject well but is deficient in training, or one who has acquired the necessary technique but has a poor knowledge of the subject. We cannot refuse both: one of the two has to be chosen and a wise headmaster chooses the first. It is less risky to entrust the class to one who knows the subject but teaches it in a clumsy manner than to one who does not know much of the subject, although he can teach well what little he knows. One would have a well filled with water and a crude water-lift rather than a well with scanty water-supply and an up-to-date pumping set. Thirty years ago there was no provision in Bombay Presidency for the training of teachers: it was a tolerable situation, however. But imagine, for a moment, that our Arts Colleges are all closed, that the general education which one can get is all limited to Matriculation standard and that the secondary school staffs consist wholly of Failed Matriculates, Matriculates, and Matriculates with certificates of training for a year or two. It is an unthinkable situation. You will wonder why I am asking you to picture it even in imagination. There could not be a greater absurdity in any educational organisation.

### **Qualifications of the Primary Teacher.**

And yet for over eighty years we have been experiencing an almost identical situation in our primary schools. What are the qualifications of an average Primary teacher? He is either a Failed V. F., or V. F. (Vernacular Final), or V. F. with a year or two's training. His knowledge of the subjects he has to teach is poor but he is taught some teaching technique and certified as a qualified teacher. In the beginning, in about 1860,

it was a pardonable procedure. Fortunately it did not then prove so objectionable either. Owing to the paucity of secondary schools, a number of intelligent young men passed V F and sought admission to the Primary Training Colleges. In the Training Colleges again greater emphasis was placed on further acquirement of the knowledge of school subjects and less on teaching technique. Men who passed out of the Training Colleges, after completing full three years' course, had excellent grounding in Marathi (Gujarati, Kannada, or Urdu), some knowledge of Sanskrit, Histories of India and England, Algebra of a standard slightly higher than that of Matriculation, rudiments of Astronomy and Physics, besides the training in class management and methods of teaching. Men of those days have mostly retired by now but an hour's talk with one of them would disclose their superior calibre. Poverty kept them away from English education, but that was a blessing to the Primary schools of those days.

Gradually a change came about. English education became more easily accessible and every child with ambition and intelligence went to an Anglo Vernacular school, aspiring to pass the Matriculation and to be a B A, if possible. The quality of the recruits to the Primary Training Colleges naturally suffered and a need was felt to lighten the courses. Sanskrit, English, History and Algebra were then dropped, and the effect of the change has been that the new recruits have been not only men of inferior calibre but also less prepared than their predecessors.

### Retrenchment Pedagogy

In or about 1922, obsessed by the extreme need of retrenchment Government thoughtlessly enunciated a strange principle. It was considered wasteful to have for elementary schools teachers with three years' training, or any training. It was considered enough to recruit only 50 per cent trained hands, and that meant V F's with a year's stay in a Primary Training Institution. Our Primary schools, therefore, are now filled by Failed V F's, V F's or trained V F's and a condition is established analogous to that of secondary schools wholly staffed by Failed Matriculates, Matriculates, or Matric S T C's.

Lest I be misunderstood, let me state here that it is not my purpose to criticise the Primary teachers nor the Training Institutions. I have nothing but respect for the poor primary teacher, who is starved physically as well as mentally and I am greatly agitated when I contemplate the condition to which our Primary Training Colleges have been reduced by the retrenchment

pedagogy of the Department of Education. I have taken this survey here because without a correct perspective of the background it will be difficult to appreciate the new picture which I wish to paint on the educational canvas.

### **Dwarfs Beget Dwarfs.**

It will now be agreed, I believe, that the staffing of our primary schools has been wrong in principle, because for eighty years, even when the retrenchment demon was not in the field, the primary teacher had been an intellectual dwarf and has continued to be an intellectual dwarf. His general knowledge at the present V. F. stage, is that of the boy reading in A. V. standard III and in the Training College it does not go much beyond that of the boy of A. V. standard V. In an English school one may, if one chooses, have all one's staff of Matriculates: but that would be one's choice: one can get better qualified teachers if one wants to. In a primary school, however, one has to recruit all V. F.'s. It is not a choice, it is the only alternative. There is no institution where a V. F. can study further unless he decides to go to an A. V. school and waste more than half his time in reading English for which he has no earthly use in the rural area where he has to work. The average elementary teacher does not need high academic attainments, but in India, he is a sort of an out-caste in the academic world, not permitted to progress unless he learns a foreign language, English. And the ill-effects of this intellectual stagnation are felt by our primary schools. If the teachers are ignorant, if they have no capacity to grasp the principles of education, and therefore are lacking in initiative is there any wonder that there has been a huge wastage of money and effort in our primary schools? One cannot draw water from a well if there is none in the well: and one has no right to expect the product of the primary school to be of a level higher than that of the best teacher of the school. Dwarfs beget dwarfs and the intellectual dwarfs who have the charge of our primary schools are giving us a race of intellectual dwarfs. This is a national calamity and an important aspect of Educational Reconstruction demanding immediate attention.

### **Wanted New Orientation.**

The remedy lies in a new orientation of our out-look in education. In 1834 it might have been necessary for one to learn English if one would know modern literature and modern science. In 1870 it might have been necessary to close the



in-stitution which aimed at giving higher knowledge in Marathi<sup>1</sup> But things have materially changed in the last 60 years, and time has certainly arrived to try again what was once abandoned as wasteful. Whatever were the notions of Macaulay and others like him, it is now generally recognised that English is and will continue to be a foreign language in India. Owing to its political and commercial dominance, it may be the lingua franca of inter provincial discussion, and owing to its high development it may continue to be the language of University studies, but it is ridiculous to insist that any one who would learn anything beyond the V F standard shall learn English. Besides being a great handicap, this insistence on the study of a foreign language by all has an unwelcome effect on the outlook of the people in rural areas. "It has given to our already caste ridden country yet another caste of the English educated who cannot express themselves except through the aid of a foreign tongue," said Sir Ross Masood, in a recent speech, and it will be admitted that there is much truth in the remark.

### Start Vernacular Colleges

One obvious remedy would be to give English a second place in schools and colleges, to teach it as a second language, and to stop its use as a vehicle of instruction. I am, however, not suggesting here anything so radical, a logical conclusion is not always a desirable consummation, nor can it be secured in the present case without a revolution in the existing educational system. I am proposing something which can be achieved without disturbing the present arrangements and without much addition to the educational budget. My submission is that time has now come for starting what may be called Vernacular Colleges, (to distinguish them from the English Colleges affiliated to the University) to which V F's will be admitted and where their general education will be continued for three years but without compulsion to learn English. They will in these Colleges learn their mother tongue and some of the following subjects according to their choice and aptitudes. History of England, a period from Indian History, Mathematics, Geography, General Science, Logic, Indian Administration, Sanskrit, an Indian language other than the mother tongue, Economics and Civics of the Intermediate standard and appear at a public examination conducted by the Department of Education or a Board created

<sup>1</sup> The Training College for Men Poona had classes for giving higher education in Marathi. They were closed in or about 1870.

for the purpose. Graduates of these Vernacular Colleges alone should hereafter be regarded as qualified to enter the Primary Training Colleges and as in the Secondary Training College, Bombay, the course of training may then be of one year only. The mind of a V. F. is undeveloped intellectually. It is no easy task to initiate him into Principles of Education and Psychology and much of the present work of the Primary Training Colleges is like watering a seed thrown on a rocky soil. With three years' further study in a Vernacular College, a V. F. would be better prepared to receive the lessons at the Training College and one can do in one year what one is not able to do in three under the present conditions. When the scheme is in full swing the Primary schools will be staffed by the graduates of these Colleges, trained or untrained, and the present intellectual stagnation will be remedied to a great extent.

### **Not a Costly Measure.**

The cost of introducing this measure need not be great as the present Primary Training Colleges can be easily converted into Vernacular Colleges with Training tops and there is the possibility that like the Art Colleges affiliated to the University, private Vernacular Colleges, aided or unaided, will spring up in district towns, Government retaining to itself only the conduct of Training Institutions. The educational market will then be flooded with these trained graduates of the Vernacular Colleges and the need of fixing the salaries for 1st, 2nd, 3rd year certificates and the artificial control of the facilities of training will disappear. The picture as it is described may not be faultless, but it is hoped that the outline of it will be found attractive enough for an artist to fill in the details.

### **Leaders with Rural Bias.**

The measure is likely to prove beneficial in other directions as well. The number of students appearing at V. F. is at present commensurate with that appearing at the Matriculation. They are not driven to the standard by any kind of compulsion, nor are they all aspiring for the none too enviable teacher's job in a Primary school, nor for the Talati's office in the Revenue Department. Many of them are anxious to learn and in rural areas their first ambition is to pass V. F. They then discover that their path to progress is closed unless they learn English. Vernacular Colleges described above will offer opportunities to those young men from rural areas who wish to be further educated but without the handicap of learning a foreign language

of which they have no use in their rural world. Graduates of the Vernacular Colleges will be the natural leaders of rural areas and will have necessarily better preparation to face the new problems they will have to solve under the new constitution. They will be the persons best qualified to lead the campaign of rural uplift.

### Better Exercise of Franchise

One great feature of the new constitution which will be in force from April 1937, is the widening of the franchise. Lakhs will now vote where there were only a few thousands, and in order that these enfranchised villagers may be able to exercise their privilege rightly, it is essential that at least the leaders of the villages should have general knowledge of an order higher than that of a V. F. To get it they must at present spend five to seven years in an A. V. school, in a Vernacular College they will learn more in half the time.

### Vocational Schools for Masses.

The supply of medical aid to rural areas is a great problem. It is not possible to teach a V. F. even the elements of Medical science and there is no alternative but to tempt our L. C. P. S.'s and M. B. B. S.'s to go to villages by offering them attractive allowances. One can easily imagine, however, Medical schools where the science of Medicine is taught in Vernacular to the graduates of Vernacular Colleges and the products of which are not much inferior to our L. C. P. S.'s, they will be men with a definite rural bias and will need no special inducement to live in villages. It is again not unlikely that some of the graduates of the Vernacular Colleges will be attracted to the technical schools and help to improve the tone of their work with much benefit to themselves and to the villages where they will settle.

### Education Independent of English Literacy.

It is unnecessary to elaborate the manifold advantages which must accrue to the nation by making it possible for her children to acquire knowledge without the necessity of learning a foreign language. It is indeed unfortunate that in India one must know a foreign language if one will be called educated and it is not easy to persuade these "educated" people that there is something fundamentally wrong in this conception. I will not attempt it here, it will be enough for the present if it be granted that the knowledge of the average Primary teacher is too inadequate to qualify him for the responsible work entrusted to his care, and

that it is an immediate necessity to raise his efficiency by providing him further education without the wasteful method of passing through the mill of the A. V. school. Once this is granted, the conclusion is inevitable that time has come to create what may be called Vernacular Colleges where education of the Intermediate standard will be available without compulsion to learn English or to learn through English.

## ODD PLAYTHINGS

BY

LYDIA LION ROBERTS

There are many things in the average home that will make odd and interesting playthings for the children, if a bit of thought and ingenuity is given to their presentation.

An old umbrella may be used in several ways. It provides an ideal cave, a shelter on a desert island or an Alaskan igloo. Ball- or marbles may be rolled from the top of it to a certain spot on the floor, the one coming the nearest, winning the game. Then, too, if the umbrella be carried, tiny paper kites or airplanes tied to the ribs by long strings will bob and sway merrily in the breeze as one walks along.

Great fun may be enjoyed from a large sheet of light coloured wrapping paper—a sheet larger than a child. Place the paper against a wall, let one child stand up against it with arms hanging loosely and let another child outline his figure with crayon or pencil on the paper and then fill in the features and dress or suit in color. Various hands, arms and feet may be outlined on the paper in the same way making a comical collection which can be cut out and saved for further play.

Cereal boxes of any shape make amusing faces if features are cut out and bright coloured paper pasted at the back of the holes. Perhaps the children would like to paint all over the boxes first, each box a different color. A whole circus may be evolved from these boxes if clothespins are used for the legs of the animals. Cereal boxes make fine trains, strings should connect the cars, and a large and small box may be combined for the engine. Also, the boxes may be piled up for towers, barns or doll houses.

An unused inexpensive mirror, or an old picture frame enclosing silver or cellophane paper instead of a picture, will make a delightful skating rink for paper dolls, a pond for tiny boats or even a glacier on the side of a cereal box mountain, for explorers.

A discarded window shade on a roller can be changed into a moving picture if various figures and scenes are pasted on it and then it is unrolled slowly. A whole story might be illustrated by pasting on appropriate scenes, with animals and people.

One must work, of course, from the bottom to the top of the shade. Both sides may be utilized.

Suppose there is no possibility of buying playthings for the boys and girls on festival days. The overzealous mother, reading of the possibilities of an old window shade may say, "O, if I only had time I would make one of those 'movies' for the children." Don't be tempted, dear parent! Let the children make it. It is the making that is most of the fun.

—HOME EDUCATION.

## CINEMA AND RADIO IN EDUCATION

BY

SHEIKH IFTAKHAR HASOOL

The question of using didactic means to make teaching efficacious has frequently been the subject of discussion.

We have seen recently that the conception of an exclusively sensorial education has given place to that of the education of the mind. But the mind can manifest itself only through reactions which pre-suppose the notions of which ideas are formed. Which senses, therefore, are of most importance for increasing our sphere of knowledge? Undoubtedly touch, sight, and hearing. Indeed, sight and hearing are considered by some as the chief aesthetic senses, since harmonies of colour and sound give us pleasure and arouse vivid and emotional images. On the other hand, the fundamental forms of man's expression are gestures and words: the gesture which goes from the least to the greatest movement and words which range from the first vocal sounds to cries, singing and language. The gesture may become a graphic movement: the world a description of pictures represented in our minds by chromatic shades and the forms of visual sensorial nature. This representation is therefore also possible through acoustic stimuli by means of language, when the visual education is equally advanced. If aesthetic cognitions and enjoyments are possible through the visual acoustic senses, the talking film assumes an educational value of the highest importance.

Technical and pedagogical discussions have been held recently as to whether it is advisable, from a didactic point of view, to use the talking film or to have the silent film illustrated by the voice of the teacher. There is no doubt that the teacher's voice is definitely more efficacious than the voice reproduced on the screen. In this connection the question has been discussed as to whether it would be advisable to make use of the gramophone for teaching languages.

The power of suggestion which emanates from the entire person of the teacher and especially from his glance, is lacking in reproduced language. The teacher can also dwell at length on the points of most importance to his pupils, reply to their questions, make them feel his scientific authority, without which his prestige would be lessened, and avoid that mechanical quality

in teaching which makes it monotonous and extraneous to the scholastic formation which should result from the pupil's reactions, because there is insufficient learning without the intellectual or motor reactions manifested through language and practical activities.

Those dealing with didactic means, therefore, cannot disregard, together with the visual image, the stimuli which reach the pupil through other senses. While the very nature of the various psycho-sensorial reagents diffused through the pedagogic and psycho-technical field do not allow of exact classification and co-ordination into one slight body it would certainly be advisable that the fundamental means which appeal to hearing and sight should be studied and co-ordinated into one course of research. It is the radio which enters even into the simplest homes, that continually introduces new educational rules, which is carried, parallel with the cinema, into the most remote regions, bringing isolated country districts near to the source of knowledge, hitherto beyond the reach of those living far from the big towns, thus ensuring that the minds of the dwellers in outlying regions shall be formed in accordance with the rules of civilised life and the supreme ends of man.

Today with the talking cinema, the efficacy of a film is based on the impressions received by eye and ear; tomorrow, television will make appeal to ear and eye. All this shows that there are no sharp divisions between the senses, that, by Muller's Law of the Specific Energies of the organs of senses, one stimulus may give several different sensations.

It is high time now that a body should be formed to regulate educational activities through other didactic means that are universally adopted, such as the phonic systems, from the wireless to the gramophone and all those others which, by their importance, attract the interest of the general public and may contribute to raise the people and educate the young who are preparing for life.



# STATISTICS OF EDUCATION IN ENGLAND AND WALES, 1935

COMPILED BY  
PRINCIPAL K S VAKIL, M Ed, KOLHAPUR

Area in square miles	58,340
Population (estimated) 31st March, 1935	40,600,000
Public Elementary Schools maintained by Local Education authorities	20,854 (with 150,439 classes)
Public Elementary School Pupils	5,402,052 (50.5 p c boys and 49.5 p c girls)
" " " ,	Percentage to Population 13
" " " Teachers	170,574 (28 p c men and 72 p c women)
" " Certified	77 p c (33 p c men and 67 p c women)
" " Graduates	6.3 p c
Secondary Schools	2,094 (1,380 on the Grant List—499 for boys, 486 for girls, and 395 mixed for boys and girls)
Secondary School Pupils	547,506 (54 p c boys and 46 p c girls) (456,783 in grant aided schools of whom 47.3 p c pay no fees, 47 p c pay partial fees, and 4.8 p c full fees)
" " "	Percentage to Pupils in Elementary Schools 10 p c
" " "	Percentage to Population 1.3
" " "	Percentage of Ex Public Elementary School pupils in Secondary Schools to the total number of pupils in Secondary Schools 75.7 p c

Percentage of Public Elementary School pupils admitted to Secondary Schools during the year ending July 1st. 1935: 12'6.

Secondary School Teachers .. 23,425 (51 p. c. men and 49 p. c. women)  
(in Schools on the Grant List).

Secondary School Examinations:

	Appeared.	Passed.	Percentage.
First Examination (1935) ..	70,183	51,238	73'0
Second Examination (1935)	11,375	7,650	67'3

Universities and University Schools and Colleges. 20.

Students .. .. 85,201. (40,083 full-time (30,550 men and 9,533 women), 10,270 part-time (7,711 men and 2,559 women), 11,896 taking courses not of a University standard) and 22,952 students attending extramural classes.)

State Scholars .. .. 982 (619 men and 363 women).

Local Education Authority Scholars. 8,997 (5,482 men and 3,515 women).

Teacher Training Institutions .. 110.

.. .. Students 16,175 (5,690 men and 10,485 women).

Total Government Grants for Education. £46,990,000 or £1.3.2 per head of population.

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( Edited and Published by the All-India Federation of Educational Associations, Post-Box 52, Cawnpore )

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- (1) To act as an information Centre for all matters relating to Indian Education
- (2) To encourage scientific investigation in educational sphere and to stimulate statistical enquiries or those relating to experimental projects.
- (3) To consolidate a public of those who, finding it impossible to be indifferent about the educational drift of India, believe that a concern for the health of educational criticism is immediately relevant to the political and economic urgencies of the time
- (4) To provide a mouthpiece for Indian educational thinkers and researchers.
- (5) To strive for World Peace through Education.

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VOL. II .

NOS. 5 & 6

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR:  
D. P. KHATTRY



MAY & JUNE, 1937

ALL-INDIA FEDERATION OF  
EDUCATIONAL ASSOCIATIONS

POST-BOX 52, CAWNPORE

PRICE ANNAS EIGHT

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DR. ZIAUDDIN AHMAD M.A., PH.D., C.I.E.  
*Vice-Chancellor Muslim University Aligarh*

# Indian Journal of Education

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Vol. II { MAY & JUNE 1937 { Nos. 5 & 6

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## REORGANISATION OF EXAMINATION SYSTEM

BY

DR. ZIAUDDIN AHMAD, M.A., Ph.D., C.I.E.

*Vice-Chancellor, Muslim University, Aligarh*

Dissatisfaction with examinations is universal. It is no longer local, it exists in all countries. Their failure as means of school promotion, as tests of entrance to Universities, as instruments of selection to the professions, has recently been established in America and in different European countries. Munificent grants have been made by the Carnegie Foundation for enquiries into different national systems of examinations.

In spite of this very wide, almost universal, dissatisfaction with the existing state of things, hardly any responsible educationist or social reformer has advocated the total sweeping away of the examination system. Whatever may be their defects, and however grave they may be, examinations as they stand at present cannot be abolished without exposing education and society to dangers and inconveniences even greater than those for which examinations are responsible. They are a social necessity from more point of view than one. They are our destiny. No society that wanted to sift out talent from the masses could do without them. The Schools need them as means of classification and of promotion, the Universities need them for the purpose of testing at various stages the attainment of their alumni. The employer needs them as a guarantee of what he ought to expect of his prospective employee. Parents want educational institutions to furnish them with a guarantee of their children having profited by instruction. Students on their part want some tangible recognition of their efforts and intelligence.

The problem before us is therefore not of ending, but of mending, examinations.

There are four distinct systems of examinations now followed in different countries. For the sake of convenience they may be called

- (a) The English system,
- (b) The German system,
- (c) The French system, and,
- (d) The American system or the New Type of Examination.

The essence of the English System of Examination is that examiners and examinees do not personally know each other, and strict secrecy is maintained at every stage. The same papers are set at different centres, and the examining authorities declare the result by totalling marks given by the examiners. In the case of large examinations sub-examiners are also appointed with different standards of marking. The results are usually announced after an interval of several weeks, in the case of the Senior Cambridge Examination conducted in India and in the Colonies the period extends over three months.

The German system is just the reverse and it is very similar to the examinations we had in India in old Arabic and Sanskrit institutions. The examinee chooses his own examiner and the date of his examination. He has to submit some kind of dissertation which is followed by oral tests. Numerical marks are not awarded.

In France examinations are not conducted by one central authority. Each University conducts them in its own territorial area. All public examinations are held twice a year, once at the end of the academic session, and again just after the long vacation. Examination scripts are not sent to examiners, who themselves go to the examination centre, mark the script there, and announce the result within a fortnight after conducting oral examination. Marks and scripts are open to the public, and parents are permitted to be present at the oral test. School records are taken into account in arriving at the final result.

The new Type of Test is still in the experimental stage. In this, effort is made to set questions in such a manner so as to eliminate the element of chance due to the error of perception or to the personal equation of the examiner. The questions are so designed that they can be answered by dots, dashes, crosses or in a few words. A large number of questions are set, and a wider range of knowledge can be tested than is possible in the older type of examination. Variability in marking is effectively prevented.

The Indian system of examinations has all the evils of the English system, and none of its good features. Its greatest defects are traceable to the "secrecy" which envelopes its organisation and technique, and in the "finality" of the mark once awarded by the examiner.

The tradition of secrecy is a most vicious one. It is difficult to understand why the principles, methods and organisations of many examinations should be shrouded in darkness. This is unnecessary and appears to spring from fear of criticism. As Mr. B. C. Wallis, one of the chief examiners in England remarks with a certain amount of exaggeration, secrecy in examinations "has covered deliberate and culpable neglect of duty, gross inefficiency, and other defects due to bias, caprice or deliberate intention of examiners."

Another serious defect of the Indian system of examinations is the finality of marks. The marks given by examiners are treated as sacred and final. They are considered incapable of modification. In one examination with which I am familiar the examiner entered the marks on the marks sheet without examining the answer books. This was discovered because all the candidates entered on any particular page of the marks sheet were found to have been awarded the same numerical mark. The examining authorities were convinced of the unfairness done to examinees, but their regulations did not permit the redressing of the wrong.

The unreasonableness of secrecy and finality is borne out by the findings of researches relating to the variability of examiners' marks. Starch and Elliot's early enquiries showed that the marks for the same paper, given by different examiners, may run over the entire range of the percentile scale. More recently the valuable enquiries by Professor Valentile and by Hartog and Rhodes in England have brought to light disquieting facts regarding the unreliability of individual examiner's marks. In one national enquiry the investigators used actual examination scripts and employed experienced examiners. The marks given by different examiners to the same script were found to range from 16 to 71. In another investigation two school students were employed as examiners. The reliability and the marking of these two school students was found to be 39 per cent as against the reliability of marking of experienced professors which was found to be 52 per cent.

In America the marks awarded by different examiners to a Geometry paper where variability is minimum were found to range from 28 per cent to 92 per cent.

Unfortunately thoroughgoing enquiries along these lines have not been made on a large scale in India. An important statistical research on the differences of perception in valuing answer books that has come to my notice was done by Mr Kuppaswamy of Trivandrum. He selected three answer books in mathematics from the Model School. They were examined by 46 experienced teachers and the marks varied all the way from 39 to 71. After examining various cases he remarked that no serious injustice would be done to candidates if the marks allotted were simply drawn out of a ballot box. What he meant was that marks depend upon the lottery involved in the selection of the particular examiner. One is inclined to ask, "Why use the examiner as an intermediary at all? Why not draw lots straightaway?"

The imperfections of examinations may be divided into two classes—the unavoidable examination errors which may be called scientific errors, and incidental imperfections.

Edgeworth classified the unavoidable errors into (a) errors due to minimum sensible, (b) deviation error, (c) error due to difference of scale, (d) deviation due to speed, and (e) error due to the fatigue of the examiner. The aggregate of these errors amounts to 7 per cent.

Attention has recently been called (by Frank Sandon and others) to other imperfections, e.g., (1) the fluctuation due to varying interpretation of the marking schedule of different examiners, (2) error due to what has been called by Valentine the Instability of the candidate, (3) unreliability of questions which fail to give a consistent indication of the ability of the candidate in the prescribed syllabus, and (4) error due to the non representative character of the selection of topic and syllabus of the subject as a whole. In addition to these errors there are other errors which cannot be scientifically classified and which may be called the idiosyncracies of the examiner and the examinee.

In large examinations where a number of sub-examiners are appointed a new problem arises, i.e. the reduction of the marks of different examiners to a common scale. The reduction will have to be done not only in the case of different subjects, but in the case of the same subject in different years.

Time does not permit me to mention other defects of examinations. We need a thorough and searching enquiry into our examinations, but there are a few changes which we can immediately introduce without substantially changing the structure of the system.

(1) Every answer book in all examinations must be examined by more than one person, without one examiner being aware of the marks awarded by other examiners. In case of marked discrepancy the paper should be examined by the head-examiner or by the Chairman of the Examination Committee.

(2) Model answers must be prepared by the head-examiners and must be periodically published.

(3) In lower examinations assistant examiners must meet and discuss schemes of marking.

I now come to the Competitive Examinations which select candidates for public services. They are characterised by almost all the defects of examinations. In addition to the errors which I have just quoted, they are also subject to the following limitations:—

(a) In the first place the basis of selection is unsound and unreliable. The manner of preliminary selection of candidates who are allowed to appear in the examination is the first practical difficulty. Some authorities have devised a unique method of preliminary selection. They do not select candidates by interview but on the basis of the results of a University examination. Candidates who pass this examination in the First Division are all selected, those who pass in the third division are all rejected, and a small number of such second divisioners as happen to catch the fancy of the selection authority are also selected. This method is open to the objection that the meaning of first division in different Universities or in the same University in different years is not the same. The candidates, therefore, who are selected on the basis of the first division obtained in their Universities do not necessarily possess equal degree of merit. And when we come to the second divisioners, we can find the basis of selection arbitrary and confused.

Another serious source of discrepant and unreliable evaluation of merit is the large number of alternative subjects allowed, particularly because the standards of marking in different subjects differ very widely and no attempt is made to reduce the marks to a common scale. The standard of marking varies not only from subject to subject but in the same subject from year to year on account of the change in examiners. The papers are not moderated and even the most glaring vagaries of examiners are not corrected. Students who offer these particular subjects whose examiners' personal equations work in the direction of leniency are handicapped in comparison with those whose examiners' equations work in the direction of strictness. If we consider along with this, the unavoidable scientific and incidental errors

which have been investigated and whose approximate numerical values have been determined and if we also take into account the absence of any attempt to reduce the marks to a common scale, it is no exaggeration to say that Competitive Examinations do not select the most competent, but the most fortunate candidates

Inquiries bearing upon the structure and organisation of different national examination systems, upon such questions as the social and educational implications of examinations, upon the validity of different kinds of marks and of different methods of marking are in progress in America and in almost every country in Europe

In India hardly anything has yet been done. I earnestly appeal to all educationists and others affected directly or indirectly by examinations to undertake a serious investigation of the many aspects of this problem so that the element of chance may be eliminated and examinations may become effective measuring instruments

## SEVEN MATTERS OF IMPORTANCE IN THE TEACHING OF LANGUAGE

BY

PAUL MCKEE

This discussion presents certain matters of importance to the teaching of language in the elementary school. Statements included are largely personal interpretations of appropriate research and of practice in schools where instruction in language is unquestionably superior. The discussion in no way denies the significance of other important matters not included.

1. Instruction in language should provide for the teaching of all language activities which hold significance for the child, either in life outside the school or inside of schools where a rich program of instruction in varied curriculum fields exists. The program in oral composition should include definite teaching of (a) conversation; (b) story telling; (c) use of the telephone; (d) announcements and directions; (e) explanations and descriptions; (f) reports and reviews; (g) speeches; and (h) meetings.

The program in written composition should provide for instruction in (a) letter writing; (b) making records, including reports and reviews; (c) writing announcements and directions; (d) writing explanations and descriptions; (e) making summaries and outlines; (f) making a bibliography; and (g) creative writing.

In mechanics, the program should include appropriate teaching of certain items in (a) capitalization; (b) punctuation; (c) correct usage of words; (d) sentence sense; (e) paragraphing; (f) speech; and (g) vocabulary. No program of instruction in language which includes less than twenty-two language activities can be considered adequate.

2. Analyses of modern textbooks and courses of study show that these instruments are too partial and too "makeshift." Many of them fail to include any instruction in some important language activities. Also, too few items are covered in the activities they do include. For example, the program in conversation often fails to include many items important to learn about carrying on a conversation. In addition, "makeshifts" appear when some more or less vague performance is substituted for a really important language activity. A common example of this



occurs in the labelling of several different oral activities as "conversations" which could not possibly be considered as valid means of giving instruction in real conversation

3 The organization of instruction in language is a problem that excites considerable controversy. Some persons cling to the practice of teaching language isolated from other school activities. This means that children are taught conversation, letter writing, and other language activities during a period set aside for that purpose, and that little if any provision is made for the utilization of these language activities in other school work. Thus, the child loses splendid opportunities for meaningful practice in language, and becomes aware of the fact that, in school, language is inconsequential except during the language period. Moreover unless the teacher is particularly skillful, such organization is likely to lead to mechanical and meaningless teaching of language.

Other persons prefer to incorporate the teaching of language as part of the program in some one or more content fields, usually social studies, or as part of a program of non-subject matter activities. Usually this eliminates the language period and provides for the teaching of language as the need for it arises in instruction in the content fields. Unfortunately, under this provision it is impossible to teach some important language items without making them unreal and meaningless. Furthermore, the attempt to teach language items with instruction in some content field or activity, when those items are not needed in order to do a good job, makes both the language items and the activity in which they are used ridiculous in the child's mind, and also blocks the development of important attitudes toward learning. It is also obvious that children have the right to learn, to talk and write about many things that have no bearing upon social studies, or upon any one or all content fields or activities that can constitute the most progressive curriculum. Further, it is probable that few teachers of content fields are sufficiently equipped in the teaching of language to insure reasonable achievement in that field under this plan.

Probably the best plan of organization demands the use of a language period, as well as persistent and skillful use of language activities in connection with all school work. All of the twenty-two language activities mentioned previously can be introduced and taught by a skillful teacher with full meaning, informality, and reality in the language period. Furthermore, when performance of language in other school work is found to be deficient, the need arises for taking these activities into a language period.

for concentrated attention. But this is not enough. The best teaching of social studies and all content fields abound in demands for the use of important language activities. Certain types of letters need to be written in gathering material for the study of a unit. Announcements, directions, explanations, and descriptions need to be given or written. Records need to be made, reports and reviews given, and most discussions should be real conversations. The teacher and children must learn to anticipate, plan for, and utilize such real opportunities for language activities in all school work.

4. The most fundamental idea to be thoroughly mastered about language is that content is more important than form. Emphasis must be placed upon the acquisition and selection of ideas to be expressed. In conversation, the child should understand early that good conversationalists have a variety of things to talk about, and he should become conscious of ways in which ideas for conversation can be acquired. In letter writing, he must learn first to consider what should be said, to ask himself such questions as: "What would this person most like to hear?" or "What information should be placed in this business letter to make it clear?" Likewise, in announcements, directions, reviews, and all other functional activities, the child should realize from the beginning that the prime responsibility is the acquiring and selecting of content to be spoken or written. While this does not deny the importance of correct form, it does insist that correct form with meaningless incorrect, or inconsiderate content is nothing, and that the child who becomes "content conscious" takes the most important step toward independence in good speaking and writing, and toward a recognition of the need to refrain from speaking and writing when ideas are lacking. Furthermore, when the child has ideas to express, desired spontaneity is easily developed by the teacher who maintains an informal attitude in the classroom.

5. The content which children are encouraged to write must be well within their experiences. There is no particular need or place for the writing of unfamiliar ideas. Utilization of this principle is essential if the child is to become fully conscious of the fundamental importance of content in his writing, and if he is to be expected to learn to write with any degree of skill.

Nor is this all. There exists today a considerable amount of valid evidence showing that verbalism is widespread throughout the school. In the case of social studies, science, geography, history, and reading, children are adept at utilizing words and phrases without realizing the meaning that lies behind them.

Moreover, these children seldom make any attempt to discover the meanings of words they do not know, and they are not particularly adverse to writing what they do not understand.

The verbalism permeating much school work probably has part of its source in poor instruction in written composition. To teach language in a manner that encourages the child to write about unfamiliar matters probably contributes to his use of mere symbols and to his lack of concern about meaning in what he writes. In turn, this undesirable but possible outcome may be detrimental, not only to sound achievement in language, but also to meaningful learning in all fields.

6 Recent evidence points to the fact that a much closer relation exists between achievement in language and achievement in reading than is commonly suspected. It is becoming clear that some of the supposed reading difficulties of children are really language deficiencies. For one thing, certain comprehension difficulties in reading have their source in the child's unfamiliarity with concepts and the symbols that are used to represent them. The business of preparing children for reading necessarily involves the acquisition of concepts occurring in material to be read and the achievement of familiarity with these concepts in oral expression, and it is a matter which requires attention at all grade levels in connection with the reading of all types of material.

There is reason to expect that instruction in language can reinforce the program in reading by helping to increase the pupil's realization of meaning as he reads. At early primary grade levels many of the concepts to be met in reading should be introduced, talked about, and clarified through oral language activities. Later, it is possible that ideas to be read about might, for example, serve as topics for some of the conversations to be carried on.

7 No program in language can be fundamental in character unless it places emphasis at all grade levels upon the thinking that the child should do before expression takes place. In carrying on any functional language activity, ideas must be carefully weighed and selected in terms of the purpose which the speaking or writing is to serve. Once selected, ideas must be organized and arranged in terms of the same purpose. A most important part of this thinking is concerned with using care about the accuracy of content.

This necessity of thinking before expression takes place means that in all functional language activities, attention must be given to careful planning. In group activities, such as the making of a record or the writing of a group letter, the teacher and the

children should spend time deciding upon ideas to be included, how these ideas may best be arranged, and how they may be stated attractively. There is good reason to believe that careful training in thinking about what is to be written not only improves the content itself, but also aids greatly in securing correctness in certain mechanical items, such as punctuation, sentence structure, and paragraphing.

—EDUCATION, BOSTON.

# CONTRIBUTIONS OF PLATO AND ARISTOTLE TOWARDS PROGRESS AND SPIRIT OF EDUCATION BEFORE THE MIDDLE AGES

BY

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PLATO (428-427 B C—348-347 B C)

Plato was born in the year 428-427 B C. He was the son of Ariston and Perictione as his mother had married two husbands. His parents were very distinguished Athenians, very respectable and extremely well to do. Plato from the very beginning displayed a strong political bend of mind. But it is fortunate that he never took any active part in it even when he was forced by the Reactionaries. This is due to his feeling that in the active politics there is not much field for a conscientious man. In 399 B C when Socrates was executed by the Reactionaries he felt so much disgusted that he spent the next few years in extensive travels in Greece, Egypt, and Italy.

Soon after 387, Plato founded the Academy. This was an institution designed to pursue philosophy and Scientific Research in a systematic manner. He was at the head of the Academy for a long time. Here he delivered lectures to his students without the aid of any manuscript on various subjects. So far as the political side was concerned there was a rivalry between the Academy and the School of Isocrates.

In 367, Plato accepted to leave the Academy and go to Syracuse as a Science tutor, to Dionysius II, to fit him for the position of a constitutional King. In this Scheme, however, he did not succeed on account of the national jealousy of the stronger Dion. In the year 361-360, Plato paid a 2nd visit to Syracuse, but this time also he failed.

Plato was one of the greatest of the philosophical writers. The most important mathematical work of those times was all done by him, his friends or his pupils. The most important function of Plato's Academy was the combination of mathematicians of the 5th century Pythagoreans with the

geometers and Arithmeticians of Alexandria. It was also particularly active in jurisprudence and practical legislation.

Plato's literary career extended over the greater part of a long life. He is the author of a large number of Dialogues, which are given in the Republic. These dialogues are mainly ethical and political. Some of them, however, are mystical and deal with Meta-Physics. These dialogues were intended to supply food to his soul in order that it may be made as good as possible.

Plato was one of the biggest educationists of his time. In fact Education was a subject to which he attached the greatest importance. His ideas on Education are embodied in two of his most extensive works: (a) The Republic; and (b) The Laws.

The first work was produced in the earlier part of his life when he was deeply impressed with the evils and dangers of the social order in which he lived, while the latter work was produced towards the end of his life. Some of the evils dealt with in the Republic are: 1. The defective education of children; 2. The neglect of women; 3. The general disorganisation of the State through individualism, which placed power in the hands of ignorance and rapacity instead of in those of wisdom and worth.

Adequate means of eradicating the above named evils are suggested in the Republic. It is one of the best books ever written on Education. According to Plato education of children should be a state affair. The State should determine the nature and number of children required by it at various stages. Children should be brought up in state institutions under the guiding principle of the survival of the fittest. Men and women thus relieved of the burden of parenthood are able to render better service to the State. As regards the education of children, it should not start too early. During childhood sound and strong foundations should be laid by the introduction of Gymnastics and Music. The training in these, however, should be confirmed through life. He writes in the Republic: "Now my belief is, not that the good body by any bodily excellence improves the soul, but, on the contrary that the good soul, by her own excellence, improves the body as far as this may be possible."

No strictness and compulsion should be used in imparting Education in childhood, which should both be light and amusing. This period of childhood should be utilized by the teacher in finding out the natural bend of his pupils.

Manhood involves higher education, which is not light but serious. It is contemplation in nature, and aims at the development of the soul, and its sensitiveness to real existence. The subjects advocated by Plato for the studies in Higher Education are

- (a) Number, designed to afford a training in abstraction which favourably influences the other functions,
- (b) (1) Plane Geometry, designed to develop quick apprehension and a broader vision of the idea of 'Good', which is the ultimate principle of Plato's Philosophy, (ii) Solid Geometry,
- (c) Astronomy designed to be useful from the agriculturist's and the navigator's point of view,
- (d) Advanced Music dealing with its theories, and harmonies, etc.,
- (e) Dialectic or Philosophy, which is the most fundamental of all the subjects

The above mentioned scheme of education is meant both for men as well as for women.

The ultimate aim of Plato's education is to convert a man into a perfect citizen. He strongly deprecates that education whose sole function is the acquisition of wealth or power. Above all education should be compulsory and should not be a matter of choice either on the part of the boys or their parents.

Special aptitudes of children should be suitably studied by their teachers in the earlier stages of their education. By this means alone selection of suitable boys for suitable vocations can be made.

Plato's education may be summed up in his own words in the *Laws*. 'If you ask what is the good of education in general, the answer is easy, that education makes good men, and that good men act nobly, and conquer their enemies in battle, because they are good. Education certainly gives victory, although victory sometimes produces forgetfulness of Education, for many have grown insolent from victory in war, and this insolence has engendered in them innumerable evils, and many a victory has been and will be suicidal to the victors, but Education is never suicidal.'

Having considered the life and work of Plato, let us survey briefly the life history and the important contributions made by his best pupil Aristotle in the cause of Education.

## ARISTOTLE (B.C. 384—322.)

Aristotle was born about B.C. 384 in the Greek colony of Stagira in Thrace, near the borders of Macedonia. He was the son of Nichomachus, who was a well-to-do physician. As such he became interested in physical studies from his childhood but it is rather unfortunate that, at a young age, he was deprived of the very wholesome and salutary influence of his parents on account of their death. Aristotle having lost his parents was left to the sole charge of Proxenus, who is said to have discharged very honestly his duties towards the youth. At the age of eighteen he was sent to Athens, where he came under the strong influence of Plato, and studied a very large variety of subjects. On account of his studious habits, he soon attracted the notice of his teacher, and used to help him occasionally in his work. Like great men, he is said to have surpassed his master in intellect. This did not, however, turn his head. He was very humble and showed extreme respect for his master. When Plato died in 347 B.C., Aristotle went back to Atarneus, where he remained for 3 years. Here he fell in love with Pythias whom he married. At the end of 3 years he and his wife crossed over to Mytilene.

At the age of about 40, he was appointed tutor to Alexander, the son of King Philip in Macedonia. In this capacity he did excellent work for three years. Having acquired influence with the King, he was successful in rebuilding the town of Stagira and in founding an Academy at Mieza. Aristotle continued teaching in the Academy for about 5 years, that is till 335, after which he moved to Athens. Here with the help of his old friend Xenocrates he established himself as a public teacher in the Lyceum, the Periclean gymnasium. In this gymnasium most of his pupils were foreigners. During the period of twelve years that he stayed in Athens, he did teaching work in the higher branches of Science, and composed most of his great works, and some of his works as for example, *Logic*, *Metaphysics*, *Ethics* and *Poetics* occupy the first place in the literature of these subjects. The amount of work which Aristotle did was certainly miraculous and very much more than could ordinarily be accomplished by a single individual. People grew jealous of him, and wanted to get rid of him at the earliest opportunity. They, however, refrained from openly doing harm to him for fear of Alexander's displeasure. In B.C. 373, at the sudden death of the King, the Greeks took an opportunity of completely doing away with him. He was charged with impiety for one of his poems written in memory of Hermeas. As the case was proceeding against him



he thought it desirable to leave Athens. He withdrew to Chalcis, his native country. Shortly afterwards his trouble of the stomach, from which he had suffered for a very long time, grew worse, and he ultimately succumbed to it in B.C. 322, at the age of sixty-two. Such is the life history of one of the earliest and biggest of educationists. Let us now consider his theories and contributions to Education.

## EDUCATION IS A FUNCTION OF THE STATE

According to Aristotle Education should be governed by the State, not only after birth but before birth also. The State should allow the marriage of healthy and robust persons. The best age for marriage as laid down by him is 37 for a man and 18 for a woman. During pregnancy mothers should take a special diet, light exercise, and should visit the temples and offer prayers to God for the honour done to them. They must avoid all forms of emotional excitement. Deformed and unhealthy children who are not likely to be turned into useful citizens must be exposed or destroyed.

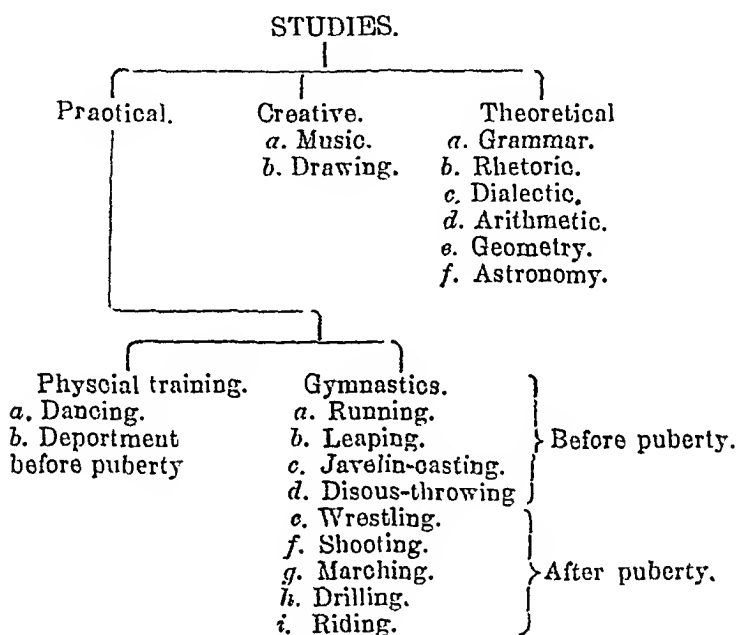
Aristotle divided the period of Education in the following four stages.

- (a) Childhood—from birth to the end of the seventh year
- (b) Boyhood—from the beginning of the 8th year to the advent of puberty
- (c) Youth—from the age of puberty to the end of twenty first year
- (d) Manhood—from the age of twenty first year to the end of life

Children in infancy should be kept on milk diet. They should avoid totally all intoxicants. Young children should not be much interfered with, nor should they be submitted to rigid discipline or instruction. But all the same proper care should be taken to see that they learn good manners and proprieties of speech. Misbehaviour in childhood should not be tolerated, and whenever it appears it should be early nipped in the bud by means of suitable punishments.

During the second stage of Education, children should receive as much of physical culture as possible. This should be achieved, in a noble and not in a ferocious manner. Up to the

age of puberty children should be restrained from taking violent exercise, as excessive exercise is detrimental for the growth of the body. Next to physical exercise, comes music. Exercises in music are essential on account of three reasons, namely, recreation, an occupation for cultured leisure or a gymnastic for the soul. Music being one of the pleasantest of things is admirably suited to the growing stage of development. It keeps the older children very usefully occupied. In the following scheme is shown Aristotle's programme of secondary education.



Manhood is the stage when young men after successfully completing their scheme of education enter upon the state duties and become citizens and politicians.

Before closing this article on the life and work of Aristotle, it would be profitable to summarise his career in the words of one of the most powerful of modern writers, H. G. Wells:

"Aristotle was a cardinal in the story of the human intelligence as Christ and Budha were in the story of the human will. Aristotle began a great new thing in the world—the classifying and analysing of information. He was the father of scientific synthesis. There had been thinkers in the world before, but he taught men to think together. He was the tutor of Alexander the Great, whose support made it possible for hi

to organise study on a scale and in a manner never before attempted. At one time he had a thousand men, scattered throughout Asia and Greece, collecting material for his natural History. Political as well as Natural Science began with him. His students made an analysis of 158 political constitutions. Aristotle's insistence on facts and their rigid analysis, the determination to look the truth in the face, was a vast new step in the human progress."

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# WILL EDUCATION GO DEMOCRATIC?

BY

ALONZO F. MYERS.

Democracy is not a major concern of our educational system. If it were, it would find expression through teaching the ideals of democracy, through the establishment of democratic procedures in schools, and through a critical evaluation of the institutions and practices of contemporary society in the light of democratic principles and standards. Perhaps the schools are not wholly to blame for this lack. It has been a long time since there was any consciousness on the part of the American people that democracy was something to be achieved, worked for, appreciated, and defended.

Few dictators have more complete authority than does the teacher over the pupils. They are regimented, marched in, marched out, made to obey rules which they have had no hand in formulating, and the reasonableness of which they do not understand. Few students, even through the university, gain experience in evaluating conflicting claims, weighing evidence, searching for the truth through a mass of misleading statements and propaganda, and finally arriving at independent judgments. Why? Because our American schools are authoritarian schools—textbook schools.

Examining teacher-administrator relationships, we again find an autocratic, rather than a democratic, pattern. Teachers are hired, fired, regimented, told what to do, how to do it, when to do it, by the administrative and supervisory hierarchy.

Supervision developed along autocratic lines because the preparation of teachers, especially at the elementary level, was inadequate and because the tenure of teachers was so brief. In 1921, teachers on the average remained in teaching in this country fewer than five years. Today the average experience probably is in excess of ten years.

Clearly, teaching is approaching a professional level in respect to requirements for licensing and tenure. In many states the teachers of today are better prepared than were the supervisors of ten years ago. Clearly, the administrative and supervisory organization and practices which were appropriate and necessary for an uneducated and transient teaching staff are not appropriate for a well educated, professionally trained, and permanent teaching staff.

But instead of recognizing supervision as a temporary expedient, there has grown up a permanent administrative and supervisory hierarchy with strong vested interests.

Undoubtedly, since the public schools are supported out of public funds, they belong to the public, and the public is entitled to exercise a considerable measure of control over them. For example, we cannot expect the public to pay the bill for education without having a right to decide how much that bill is to be.

On certain other matters, however, over which local, lay boards now exercise control, there is considerable doubt as to their fitness. Just where did school boards get their qualifications for selecting a superintendent of schools? Where did local boards get their qualifications for determining which teachers are to be employed, retained, or discharged? They are not qualified but they have the authority.

What should be done about these matters? The proposals here offered are put forth in the belief that they represent directions in which we almost surely must move.

1 Our schools must be changed from authoritarian schools to truth-seeking schools, from teacher dominated schools to child centered schools. Our textbook schools, once so necessary because of the ignorance of our teachers can and must be superseded by schools in which a library method predominates. The pupil must be encouraged to question statements, to compare conflicting viewpoints, and to arrive at independent judgments, utilizing a variety of sources, including current literature, and first hand observation and experience.

2 All professional appointments, promotions, and dismissals should be made upon recommendation of a personnel committee made up of staff members elected by the teaching staff (assuming that there is an expert, professionally minded teaching staff).

The effect of this change would be to free teachers from fear of dismissal for reasons connected with politics, religious and racial prejudice, the incurring of administrative disfavor, and the offending of board members, their wives, or their friends. It would make teachers responsible to their own profession, which would develop its own code of professional ethics to which its members would be expected to subscribe. Tenure and academic freedom would be safe in these hands.

3 Administrative and supervisory appointments should be made for a definite term of years. The person receiving such an appointment should not be eligible for reappointment. At the

expiration of his term he should return to teaching, in which his tenure would be secure.

The salary would be only slightly greater for the administrative than for the teaching posts: just enough to provide some slight compensation for giving up temporarily one's teaching duties, and enough to provide for the extra calls for contributions made of the "head man." The length of the term of service should vary with the importance of the post, probably ranging from one to two years for department chairmanships, from two to three years for principalships, and from five to six years for large-city superintendencies and university presidencies.

One objection sure to be made is that not all persons have the personal qualities essential to success in an administrative position; but the plan proposed is one of careful selection, not rotation.

Another objection is that the plan would result in placing persons without specific administrative training. But there are enough successful administrators who entered upon their work without specific preparation to cast doubt on the necessity for such training. It would be an excellent idea, however, for a person to take such a course at the beginning of his administrative duties.

In the working out of this plan the administrator would be less powerful than he now is, in his relations to the staff. At the same time, he would be less circumscribed than he now is, and much more independent.

4. Supervision, as we know it today, should cease after the teacher has served an apprenticeship period, or a probationary period of perhaps three years. During that period, the supervision should be largely in the hands of classroom teachers, or of teachers temporarily detailed to supervisory duty, who would serve as helping teachers, or counsellors, to the apprentice.

This service would be supplemented by professional adjustment service supplied by staff members of the institutions which prepared the young teacher. Legitimate functions now carried on by supervisors would be discharged by appropriate committees of the professional staff. If a profession is not capable of supervising itself, it is not worthy of being called a profession.

The major responsibility for effecting the necessary changes must rest with a highly qualified, strongly organized body of teachers who will be able to formulate their objectives clearly, interpret them to the public, and work for them unitedly, utilizing those means for their accomplishment which are available to a responsible, sincere group of professional people.

—THE EDUCATION DIGEST.

# UNEMPLOYMENT AND THE EDUCATIONAL IDEAL

BY

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One of the serious problems and devitalising forces in the Indian community at the present day, as every one knows, is the problem of unemployment among the educated classes. Though this evil has been world wide in its range and more or less equal in intensity, it has assumed still greater seriousness here because of the general appalling poverty and destitution of the people.

It is heart rending to see many young men who have fought their way successfully up the educational ladder and have gained high degrees and distinctions under none too pleasant conditions, stand helpless, their purpose in life suddenly cut off, writhing from the agony of unfulfilled ambitions and crushed hopes, cynical and disgusted with life and world, and making woeful demonstrations in open streets with the calamitous shouts of "we are hungry, give us bread". Surely, they are the most dismal of God's creation. Society cannot afford to allow a fatal worm to prey at its heart continuously till the worm finishes its fiendish feast. Further, no one can deny that unemployment on such a ghastly scale is a potential source of great social unrest which always seeks to fulfil itself.

The various causes that have led to this catastrophe are too well known and one who tries to repeat them must also prepare to be dubbed a Rip Van Winkle. The object of this article is to consider the problem of unemployment in its relation to higher education in this country and to bring out the havoc caused by our Utopian conceptions.

The conflict of ideals has become chronic with us in this country and education, like so many other spheres of our activity, is strangled under its influence. It is neither idealistic nor practical. It does not fit in either with our true spiritual traditions and ideals or with the actualities of human life in society. It does not seek to find out a happy compromise between the ideal and the real, either. It has lost its aim. It is lifeless, and as life only can beget life, it is not able to bring forth living minds.

In this connection, I have to meet a current opinion which is gradually coming into prominence that the general level of intelligence among the young men we are getting at the Universities is now much lower than what it was some years before and that we are getting mostly unsuitable men. But is this charge true? I don't suppose that something has possessed the whole youth of the country and is rapidly depriving them of their talents. It would, perhaps, be more true to say that the present generation of students lack in that interest and enthusiasm which characterised their predecessors. But, then, is this not easy enough to understand? What interest will they have when they are coming more and more to realise that what they are taught is not what the country needs and that there is nothing bright in store for them even after a strenuous labour? And is this not in itself an eloquent criticism of the present system of higher education in this country?

Some of our educationists also, have become conspicuous by their capacity for compartmental thinking. There is no relationship between the ideals they hold and the methods they employ for their fulfilment. They go on talking endlessly of the highest ideals of education and go on following as ceaselessly methods which will not even ensure them caricatures of their original ideals. If education in this country has suffered for other reasons it has also suffered on account of the existence of educationists who are still very much near Plato or Aristotle. Undoubtedly, idealism has a place, and a good place too, in all human activity. But too much of it is dangerous in that it lands us in a world of its own.

It may even be doubted whether we have any definite aim for our education. The essential preliminary for the formulation of an ideal is a sense of values. The formulation of our life's ideals should depend upon our individual evaluations of life. The formulation of an ideal for our education, therefore, should depend on a proper evaluation of education. It looks as though we are trying at present to fix up for our education an ideal based on a higher sense of values irrelevant to the hard realities of life. Having a high sense of values is no wrong; but it is mischievous when it does not fit in with the needs of life.

We have heard much about what is called 'liberal' education and of the 'cultural value' of education, etc. Unfortunately, it is, also, this view that receives greater publicity and praise because it not unusually springs forth from big chairs. Indeed, the philosophy of comfort is different from the philosophy of want.



We have been unceasingly told that 'education is for its own sake'. The plainest truth is forgotten that not one per cent among the youth of the present day take education at that. They all believe that it is an essential requisite for earning their livelihood. This is one of the hardest facts of present day life, and it is intellectual treachery to describe it otherwise. We are also told that an educated man ought to be 'contented' and that his motto is—or better, ought to be,—“disinterested honest service.” Judged from this standpoint, the 'educated men,' I am afraid, can be easily numbered on one hand. Alas! Contentment, where is it except in poetry! The poet sang — “Let me die, unwept, unhonoured and unsung.” Poor poets. They were invariably poor!

Strangely enough, there are not, even now, wanting people who try to defend the present system of University education by saying that it is none of the legitimate functions of the University to provide employment for every graduate and that 'it' is the look out of the community. But do they realise for one moment that the community has no need for the sort of higher education that is imparted in our universities? Or do they mean to argue that the community as a whole will ever be profitably employed in entertaining every young man, good, bad and indifferent, without exception? This divorce between the professed aim of our education and the needs of modern life is the main cause of the futility of the educated young man of to-day. Further, the problem of unemployment cannot be regarded as a transitory or even a stationary phenomenon. It has to be conceived as an intensely vexing problem. What is, therefore, required is a change in our attitude towards education—a new materialism which fits in with facts of life. And, whether we like it or no, it must come. Unless and until this radical change in our very conception of education comes upon us—a change towards greater utilitarianism—Universities can only serve to aggravate this problem of unemployment among the educated classes. Once we have a definite aim the methods will follow. But let us not be in a fool's paradise!

## RECREATION

[By the courtesy of the Health Section Secretariat,  
World Federation of Education Associations,  
200 Fifth Avenue, New York City.]

*The Importance of Recreation.* When man was forced to labor for 10, 12, or 14 hours a day to gain the bare minimum of subsistence, the heavy sleep of exhaustion was almost the only possible opportunity for re-creation. The harnessing of power, the development of agriculture, industry, and transportation, the better organization of human society make it increasingly easy for man to obtain the essentials and the luxuries of life with shorter hours of productive labor. The use of leisure time, therefore, promises to be one of the major problems of the future; for leisure may be either a curse or a blessing, according to the use which is made of it.

*The Scope of Leisure-time Activities.* The field of recreation is a wide and a diverse one. The following 10 major types of activity are suggested:

1. Nature Contact and Nature Crafts (including nature lore, camping, hiking, collections, and museums). Perhaps gardening might be included here.

2. Social Recreation (all forms of recreation depending for their value primarily on human contacts).

3. Physical Activities (the culture of the body as a fine art—the Greek emphasis; physical education as equipment for fine and abundant living rather than as a preparation for sports and pastimes which are an end in themselves). Human nature being what it is, even competitive sport for its own sake has re-creative value, although it also carries real dangers of over-emphasis.

College athletes have a very slightly lower expectation of life than the ordinary college population. The history of the more recent athletes suggests that under modern conditions of medical supervision the mortality of athletes is actually a little better than that of the general run of graduates.

4. Re-creative Music (music for the joy of self-expression, including bands, orchestras, chorals, etc.).

5 Re creative Drama (including pageants, pantomimes, tableaux, and puppetry, as well as plays)

6 Rhythmics (social, folk, and other types of dancing)

7 The Re creative Arts of Line, Color, Form, and Perspective (painting, sculpture, plastics, photography)

8 Handicraft Arts (work in wood, metal, textiles, leather, raffia, etc)

9 Scientific Experimentation Hobbies (astronomical, biological, geological, chemical, aeronautical, electrical, radio logical, etc) Hobbies of collecting might be included here

10 Linguistic Arts (forums, literary composition, and recreational reading)

There might perhaps be added an 11th type of psychological activity Citizenship and Politics (development of interest in public affairs and of the technique of working with and through groups)

### *The School Curriculum as a Preparation for Leisure Time*

The motive of utility, the preparation for life tasks, has been dominant in most educational systems at their inception. Gradually, however, it becomes clear that education should prepare for the whole of life, for leisure hours as well as working hours. In the world of today and tomorrow, with the task of survival made so much easier by the powers of modern science, our thinking is likely to shift even further in this direction. Man has stepped upon a new plateau where survival pursuits are to take less time and the cultural, social, and intellectual satisfactions are to become relatively more important. We shall ultimately realize that man does not live merely to work, and that life, in the fullest and richest sense, is our objective.

Viewed from this standpoint, the school curriculum takes on a new and deeper meaning. Writing becomes a new avenue of self expression, not only a means of obtaining a white collar job. Reading is a key to unlock the treasures of the intellect, not merely a tool for academic advancement. History cultivates a wider view of life. Hygiene opens the door to manifold physical satisfactions. Education in art, in music, in literature should be dominated by emphasis on appreciation of beauty and not merely on technical competence.

### *Extra Curricular Activities in Relation to the School Program*

The school curriculum should be related to all the hours spent out of school, including extra curricular leisure time activities. Hiking and collecting make the problems of nature study real. Working with the radio or with chemicals vitalizes the study of matter and energy. Stamp collecting arouses interest in geo-

graphy and history. The activities of the playing field and the camp make hygiene a serious concern and offer limitless opportunities for the development of sound practices in safety and sanitation. In art, music, and literature, extra-curricular activities stimulate interest and develop understanding. In these self-imposed interests the child becomes an active and not merely a passive factor; this is the secret of true educational progress.

*Recreation Is an Individual Problem.* What rests and recreates Mohan may be not at all suitable for Ahmad. To help each child to discover his most helpful leisure-time activities is a primary problem in education. School years are an important time for developing skills and learning a wide variety of games that will serve the individual throughout his life and that can be modified or enlarged according to the strength of his years and his changing interests. Swimming is an example of a sport that can be enjoyed independently or with others. It offers relaxation and exercise. Once the coordinations are acquired they are never wholly lost. People often confine their leisure-time programs to passive recreations that do not bring full returns in health.

*Community Provisions for Recreation.* One of the most notable social advances of the last quarter century has been a growing recognition of the importance of leisure-time activities. Special organizations like the Boy Scouts and the Girl Guides have grown to a position of national importance. The Y.M.C.A., the Y.W.C.A., the social settlements, and many other voluntary organizations have expanded their effort to provide stimulus and opportunity for constructive recreation. "Group work" has become a recognized branch of social service concerned with the art of promoting individual development through organized activity. Even in rural areas similar developments have taken place, and it should be remembered that the country boy, while he has opportunities for individual recreation which the city boy lacks, has very real unmet needs for group activity.

Developments in provision of recreation facilities by tax-supported agencies should be equally notable. Standards for playgrounds should be elaborated and many cities should make substantial progress in realizing the ideals set forth. The need for directors of recreation who give their whole time to thinking, planning, and working for the best possible use of leisure time by men, women, and children should be increasingly recognized. Our goal for every child in every community should be opportunity to play under trained leaders. In all this development the school should play an important part, through the cooperation of

teachers and the use of the school building as a meeting place for various neighborhood groups

*The Study of Community Facilities* It would be worth while for both pupils and teachers to make a systematic study of local activities in this field. It is better to work out a detailed schedule for the appraisal of community recreation, and it should not be difficult to obtain local data in regard to organized leisure time programs, park and playground distribution, and facilities for outdoor and indoor activities

—HEALTH BULLETIN FOR TEACHERS, VOL. VIII, No. 5

## LIFE AND DEATH

So he died for his faith. That is fine—  
More than most of us do.  
But stay, can you add to that line  
That he lived for it, too ?  
In death he bore witness at last  
As a martyr to truth.  
Did his life do the same in the past  
From the days of his youth ?  
It is easy to die. Men have died  
For a wish or a whim—  
From bravado or passion or pride.  
Was it harder for him ?  
But to live : every day to live out  
All the truth that he dreamt,  
While his friends met his conduct with doubt,  
And the world with contempt—  
Was it thus that he plodded ahead,  
Never turning aside ?  
Then we'll talk of the life that he led—  
Never mind how he died.

Ernest H. Crosby in the PANAMA THEOSOPHIST.

# VIDYA BHAWAN

(AN EDUCATIONAL EXPERIMENT AT UDAIPUR)

BY

PRINCIPAL R. M. THAKUR, B.COM., S.T.C.,

*Central Training College, Karachi*

Vidya Bhawan is a courageous educational experiment at Udaipur which has for five years been holding its own against many difficulties and adverse conditions. The Scheme was launched by Dr. Mohan Singh Mehta, M.A., Ph.D., LL.B., Bar at Law, the president-founder of the school in 1931, with the help of a few friends who were young and inexperienced, but who were devoted to the cause of education. It had long been felt by them that in India there was great need of an institution which might produce leaders for the community and also make experiments in the field of education with a view to exploring the system of education most suitable for India.

The nucleus of devoted workers including two English ladies promised to serve the institution on maintenance allowance. The site of the school was selected near a beautiful lake, three miles away from the bustle and noise of the city, amid surroundings of natural loveliness. Part of the building was constructed—just enough to accommodate the number of children and staff with which the school began.

## Twofold Aim.

Vidya Bhawan has a twofold aim—it aims at being a school for the teaching of the art of leadership and also at being the centre for educational research and experiment. In relation to latter aim Vidya Bhawan workers have many plans in view. Some of these schemes have already been launched, as for example a Psychological Laboratory which is already doing useful work. Psychology is being increasingly utilised in the educational field. Educationists realise that they cannot hope adequately to train the normal child, much less to understand and help the backward or difficult child, without scientific knowledge of the working of the child's mind and the stages of its growth. This experiment in Vidya Bhawan is still in its infancy, but it is

hoped to make the nucleus of a psychological clinic for giving aid to backward and nervous children.

Experiments are also being made in certain new educational methods, for example, the Dalton Plan, which aims at greater freedom and responsibility for planning and executing his own studies on the part of the scholar, or a more detailed and scientific individual attention on the part of the teacher to the children under his care.

In the Junior school methods of teaching are guided mainly by the principle of the "play way." It has long been realised by educationists that young children learn much quickly and eagerly if their education be founded on their own vital play-interests. An effort is made in Vidya Bhawan to utilize the child's own fundamental interests in education to stimulate his curiosity for learning.

### **Nursery School.**

In addition to catering for the child between five and eight Vidya Bhawan is now turning its attention to the important years between two and five. It is during these years that, foundations of the child's most important habits of thought and feeling are laid. Vidya Bhawan has this year opened a nursery school in which careful attention is being paid to the educational needs of the tiny child—to training in good habits; to that training of the senses which lays the foundation for an increased manual dexterity in the older child, and also for the later development of an appreciation of beauty; and to continual watchfulness and care where the child's health, both physical and mental is concerned.

### **Group System.**

In these ways Vidya Bhawan is endeavouring to fulfil its aim, of educational research and experiment. But the other ideal, that of training self-reliant citizens with a capacity for leadership is perhaps even more important. If a man is to take a full and responsible part in adult society he must be richly developed as an individual. One great defect of the present system of education is that the individual is lost in the crowd. In Vidya Bhawan an endeavour is made to avoid this by dividing the school into groups of fifteen to twenty children with four or five teachers in each group. These teachers act as the sympathetic and loving heads of the family groups, stimulating and guiding the activities of children in healthy channels rather than suppressing them through fear and punishment. The group master is



responsible for the all round development of the whole child and is not simply concerned with his progress in arithmetic, geography or history. The groups are the real units for work and play, for social life or organisation, and the system fosters loyalty for the boy's own group and also a healthy inter group co operation—a crying need of the day. Moreover the group master is a connecting link between home and school. It is a part of his routine work to visit the homes of the children and make an effort to establish parental co operation. A parents' league which organises lectures concerning the proper bringing up and care of children has also been established.

### Dignity of Labour.

Vidya Bhawan wishes to promote in the children a sense of the dignity of labour, and with this end in view a labour unit scheme has been developed. Just as the child has to cover a fixed syllabus before he can get promotion to a higher standard, so also he has to complete a fixed quota of physical labour. A variety of this work is provided to suit the capacity and the interests of the individual child. The boy can choose whatever kind of labour interests him most, but it has to be approved by the Labour Unit Committee, the members of which are elected from among the pupils themselves.

Vidya Bhawan has profound faith in the educational influence of open air life on the development of character. Besides organising occasional excursions and camp, all the boys and staff go in camp for about a fortnight once a year. Regular teaching work is done in the open air and the subjects of studies are selected to suit the natural surroundings. These camps and excursions are very helpful in creating in youths an interest and love for open air life, in stimulating a spirit of adventure, and awakening creative activities in the arts such as music and poetry.

The boys spend the whole of their day in school. There are day scholars as well as boarders, but they all have breakfast, midday meal and tiffin together. Thus the school aims not merely at giving instruction during certain set hours, but at catering for the whole child, for his desire, as well as his working hours and at providing a community atmosphere as a background for all his activities. Through ample provision for creative self expression Vidya Bhawan aims at helping its pupils to develop a rich all round individuality, and hopes that when they enter adult life they will prove themselves creative and responsible members of human society.

## WE WANT GOOD SCHOOLS, DO YOU?

[THE FOLLOWING CEREMONY, *prepared by an Ohio fifth-grade group, was sent to THE JOURNAL by Goodwin Watson of Teachers College, Columbia University.*]

FIRST GROUP OF CHILDREN CHANTS—Some people say that education costs too much.

SECOND GROUP OF CHILDREN CHANTS—Not half as much as guns or ships or luxuries.

FIRST GROUP—And so they put some forty children in a class.

SECOND GROUP—In crowds our special needs are not apparent.

FIRST GROUP—Crowded classrooms cramp our thinking.

SECOND GROUP—Space to move and do helps learning.

FIRST GROUP—Some people say that education costs too much.

*Solo 1:* Suppose they cut the term.

*Solo 2:* They'll close the doors.

*Solo 3:* Nail the windows shut,

*Solo 4:* Lock up the books.

*Solo 5:* They won't give us our chance!

FIRST GROUP—Some people say that education costs too much.

SECOND GROUP—Our country can afford good education.

*Solo 1:* Our parents want it.

*Solo 2:* We demand it.

*Solo 3:* Childhood has some rights.

*Solo 4:* In a democratic country.

FIRST GROUP—Millions of dollars are spent on war.

SECOND GROUP—We don't want war! Give us schools instead of battleships!

FIRST GROUP—Some people say that education costs too much.

*Solo 1:* Kindergartens aren't needed. Our grandparents got along without them. (Pantomime: Enter kindergarten children, walk to center, and place kindergarten materials in a heap.)

SECOND GROUP—*Solo 1* There we learn to live and work and play together

FIRST GROUP—Some people say that education costs too much

*Solo 2* Take music out of the schools! Why should every child learn music? (Children enter and drop music books and instruments on top of kindergarten materials)

SECOND GROUP—*Solo 2* Enrich our lives with beauty, art, and song

FIRST GROUP—Some people say that education costs too much

*Solo 3* Do away with gym! That's not important! (Children in gym suits enter with equipment, place it on other articles in center)

SECOND GROUP—*Solo 3* Gym gives us freedom, health, and happiness

FIRST GROUP—Some people say that education costs too much

*Solo 4* Take away such fads as industrial art! (Enter children with tools and lumber, place in the center)

SECOND GROUP—*Solo 4*: We learn much by working with our hands

FIRST GROUP—Some people say that education costs too much

*Solo 5* Make high school pupils pay a fee! (Enter high school pupils and deposit books on center pile)

SECOND GROUP—*Solo 5*: Free education is our heritage

FIRST GROUP—Some people said that education costs too much

ALL—Who are those people? We won't believe them! We have our rights! We want free schools! We want a full term

*Solo 1* With gym and music, art and sewing

*Solo 2* With health and safety teaching

*Solo 3* And lessons to help us understand

*Solo 4* This mixed up world today

ALL—We want our chance! We want good schools! Do you?

—THE JOURNAL OF THE NATIONAL EDUCATION ASSOCIATION,

U S A

## DO YOU TALK WITH YOUR CHILDREN?

BY

MARION BROWNFIELD.

What a strange question to ask: "Do you talk with your children?" But the visitor, the music teacher and the clergyman know how many parents talk at or over their children, quite often talking about them in their presence for punishment. It is not a wise form of punishment, and talking with children often forestalls an occasion for punishment of any kind. For example, the mother who discusses good table manners in a pleasant conversational manner with Johnnie or Dorothy Anne when the family are alone, seldom has reason to say in company, "Johnnie *will* hold his fork so awkwardly!" Such words are often said to relieve the parents' feeling of mortification and sometimes to try to shame the child into reform.

Most children learn from a simple friendly discussion in private that it is good manners to hold a fork or spoon a certain way. When the right way is reinforced by good example, and perhaps a little pity for some hypothetical person "who doesn't know better" or "is careless," children soon enjoy the correct way. Of course such lessons should be taught and the practice of them begun in very early childhood.

Talking *with* children is the best solution for almost every problem. When anything is being incorrectly done, the best remedy is to ask the child, in a companionable way, how it should have been done. It is surprising how analytical children can be of a mistake in conduct, and of what is right. Once the thing is "put up to them," their minds are aroused and their memories become more alert in the pride of being treated as responsible persons.

Talking with children takes time and patience, but it is a saver of time and disaster in the long run. Instead of endless reminders, "Johnnie, you must brush your teeth before you go to school!" a talk with Johnnie about the benefits of clean white teeth from the standpoint of looks, cleanliness and health, is much more effective. It is unwise to say to Johnnie's school teacher, "Oh, Miss Murray, I have *such* a time to get Johnnie to brush his teeth! I'm so ashamed of him, and I'm sure you must be, too!"

Johanne, being talked "at" in this way, perhaps directly after the threat "I'm going to tell your teacher how you neglect your teeth!" loses much of his self respect. From that time on, it is harder for him to meet his teacher's eye without embarrassment. He's ill at ease when called upon to recite, and grades suffer accordingly.

Instead of trying to shame any child into better behavior by "talking at him," let us try talking with him. To get Dorothy Anne to darn her own stockings may take much discussion. We must talk pleasantly with Dorothy Anne to see if the neglect is due to forgetfulness, laziness or actual dislike of that particular task. If it is forgetfulness, we might try something like setting the alarm clock to ring at "sockdarning hour." Or, if she's absent at a chum's, phone her that there's something waiting for her at home. If it is caused by laziness, it might be well for Mother to neglect something Dorothy Anne expects of her, something that contributes to Dorothy Anne's comfort. If Dorothy Anne likes cooking better than darning, Mother might make a bargain that she will darn the extra socks if Dorothy will bake the Saturday cookies or Sunday dessert. Of course all this strategy is strictly a home affair, the matter is not to be discussed outside unless Dorothy Anne, herself, chooses.

Talking with children, too, means praise as well as straightening out difficulties. It is much more effective to teach good manners and good conduct with a smile than with a frown. If Mother says occasionally, when alone with the child, "I'm proud of the courteous way you greet guests," or "answer the telephone," the child is encouraged to try to remember to be courteous. And, too, we should praise children in the privacy of the home for successfully meeting a trying situation, but we should not talk about it in their presence, before guests. Talking about children, before an audience, is apt to make them self-conscious or what is worse, "smug."

Talking with your children means friendly everyday living with them. It prevents the formation of a gulf between them and the adult members of the family. It develops poise and self respect. Round table discussions allow the child the privilege of an opinion, and thus results in teaching him to think more logically and to appreciate more keenly. If he does both, his conduct will be more thoughtful and less impulsive all through life.

—HOME EDUCATION

## JAPAN TO ENTERTAIN EDUCATORS

BY

K. TOGASKI,

*Executive Secretary, Japanese Education Association.*

The Seventh World Conference of the World Federation of Education Associations is to be held in Tokyo, August 2nd to 7th, during the coming summer of 1937. Delegates numbering close to one thousand are expected to arrive in Japan from July until the Conference dates.

The World Conference Committee of the Japanese Education Association in charge of the arrangements has been engaged in making preparations since last spring for the entertainment of these delegates in an effort to acquaint them with the true Japan. Every detail is being thoroughly investigated by a group of committees, of which there are many, so that by the time delegates arrive, a program of wide-spread interest will afford an instructive and entertaining vacation.

The Conference Secretariat is daily receiving inquiries about the conference, which indicate the general wide-spread interest the preparations are attracting.

The last meeting of this body was held at Oxford, England, during the summer of 1935, to which approximately fifteen hundred delegates came, and appropriately Tokyo has been selected as the site for this next conference, giving evidence that Tokyo, as the center of Japanese Educational policies and systems, has had great effect upon the thinking of leading world educators. No other country in the world can boast less illiteracy per unit of population than Japan, and this fact alone would be sufficient inducement to thinking people to investigate the system, but over and above that fact, the ever increasing activity of Japan in all phases of international intercourse has awakened an interest in the Orient and the Pacific Area never before witnessed in the history of the world. The center of the World's civilization, true to the prediction of the American, Theodore Roosevelt, is indeed shifting to the Pacific Area, and thinking people are now realizing the necessity of building these new relations on a basis of intelligence, peace, amity and co-operation.

Therefore, the decision of the Executive Committee to accept the offer made by the Japanese Education Association is of

tremendous significance. Granting an insight into her innermost nature, Japan will royally entertain the visitors, who will take back the facts that can destroy prejudice and animosity. The exchange of culture alone will greatly benefit both Japan and the countries who are here represented. This has the advantage of bringing Japan and the other countries of the world more closely in harmony and enables better understanding.

The conference has as its general theme "A Twentieth Century Program of Education" and two methods are to be employed in keeping this subject before the delegates. One is the general session in which every country represented at the conference will be granted the opportunity of addressing the assembled delegates. The second method to be utilized during the conference is the sectional plan, whereby the individual delegate will select that phase of education which most interests him and contribute to the wealth of the findings of that group. There are to be 18 such sections meeting daily. They are as follows:

1	Adult Education	11	Preparation of Teacher
2	Broadcasting	12	Pre School and Kinder
3	Colleges and Universities		garten
4	Commercial Education	13	Rural Life and Rural Edu
5	Educational Crafts		cation
6	Elementary Education	14	Secondary Education
7	Geography	15	Social Adjustment
8	Health	16	Teachers' Organization
9	Herman Jordan Com	17	Visual Education
	mittees	18	Science and Science
10	Home and School		Teaching

The delegates attending this conference will have ample opportunity to witness all of the things they have heard about Japan. A few of the many things which have been arranged for the entertainment of the delegates are Kabuki and Noh Dramas, Flower Arrangement, Tea Ceremony, and typical Japanese sports, such as Kendo, Judo (Jiu-jitsu) and Sumo. Also rare privileges have been offered the delegates to view national treasures seldom seen by the average visitors. Notable personages will entertain the delegates at teas, receptions, and garden parties that will add a festive spirit to the undertaking. A special series of lectures on 'Things Japanese' will be arranged prior to the beginning

of the conference for the benefit of those that arrive in Japan before August, and an additional series will be given following the conference.

Following the conference or before, according to the wishes of delegates, the Japan Tourist Bureau—the official travel agents for this conference in Japan—has made elaborate plans to give sightseeing tours commensurate with the time delegates have, the amount of money they can afford to spend, and the places they may desire to visit. The many spas and mountain resorts will give the delegate a chance of enjoying to the full the reason for the Japanese peoples' inherent worship of nature.



## HAKONE MTS.

### VIEW OF MIYANOSHITA FROM FUJIYA HOTEL



One of the most lovely places in Japan is the Hakone District which has become a great favorite with tourists as well as Japanese.

Abounding in hot springs, gorgeous scenery and attractive resorts, Hakone District lies within the crater of an extinct volcano, measuring about 25 miles in circumference. There is a beautiful lake and two turbulent rivers with good fishing for the sportsman. Beautiful walks through dense foliage offer the nature-lover an opportunity for intimate contact with the many different species of trees and shrubs with which the country-side is resplendent.

Delegates to the World Conference desiring restful surroundings could do no better any place in the world than in Hakone, where nature has changed herself from a roaring volcano with its smoke, flowing lava, and showering ashes—into a tranquil valley with soft green verdure and the chorus of happiness.

# **INTER-RELATION BETWEEN THE VARIOUS PARTS OF GEOGRAPHY**

**(Physical Geography, General Geography,  
Applied Geography and Map-Drawing)**

## **A RESEARCH PAPER**

**BY**

**VANSH G. JHINGRAN, M.Sc., B.T., B.Ed.**

**MUKANDGARH**

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## INTER-RELATION BETWEEN THE VARIOUS PARTS OF GEOGRAPHY

(Physical Geography, General Geography, Applied Geography  
and Map-Drawing.)

### I. Statement of the Problem.

Geography involves so widely different abilities as Map Drawing, General Information, Physical Knowledge and drawing inferences from Geographical data. It is true that it has been classified into Political, Physical, Economic and Commercial geography and Map-Drawing; but no attempt has been made to determine by scientific measurement the relative importance of these elements to each other and to the subject as a whole.

The problem for the present paper is to investigate by statistical methods the interrelation between these aspects and thus to determine the weightage each should receive to give the best prediction of a knowledge of geography.

By the study of geography one must gain:—

- (1) an interest in the different countries of the world, their people, their industries and their modes of life and their relation commercial and economic to one's own country;
- (2) a knowledge and understanding of geographical facts so as to account for the growth of a particular city at one place, for the development of a particular industry at another, for the scarcity or abundance of rainfall at a third and so on;
- (3) a knowledge and the use of Maps and other references to meet new problems.

In short, one must not only have the knowledge of facts but should also know how to infer from given data, and to deduce relations and correlates from geographical and allied knowledge. Neither of them is of much use alone, the two must go together and a test in geography must be able to ascertain:—

- (a) the extent of general geographical knowledge;
- (b) the ability to reason from geographical data; and—
- (c) the understanding and drawing of Maps.

There are about a dozen standardised tests on geography but these appear to be far from satisfactory and probably none of them has been prepared in a way to bring out the various phases of geography separately and relatively to each other. A few examples from some of these tests are given below —

### A THE BOSTON TESTS IN GEOGRAPHY.

- | <i>Tests</i>   | <i>Cities</i>   | <i>Products</i> |
|--|---|-----------------|
| (1) In the column marked "Products" write opposite the name of each City the name of the Product for which the city is noted | Minneapolis<br>Pittsburgh<br>Lowell<br>New Orleans<br>Duluth<br>Galveston<br>Lynn | --              |
| (2) Give reasons for the growth of Minneapolis   |   |                 |
| (3) Why do the states just east of the Rocky Mountains receive less rain than Massachusetts?                                 |   |                 |
| (4) Why are the sea ports of Russia not so important as the seaports of England?   |   |                 |
| (5) Write on the map the name of the leading manufacturing countries of Europe   |   |                 |

### B THE HANLACKY GEOGRAPHY SCALE

- 207 Name three Agencies or processes at work making rocks into soil
- 84 Name four large cities of Europe
- 217 Name five natural wonders of the United States
- 173 Why is the Niger river of less importance than the Nile?
- 50 How can you tell from what direction the wind is blowing?

### C BALLARD'S TESTS IN THE NEW EXAMINER

- (1) Supply the missing words—
- Sheffield is famous for its ———
- The highest mountain in England and Wales is called ———
- The backbone of England is the ——— which runs in the direction of ——— to ———

- (2) Answer "Yes" if you think it is true, and "No" if you think it is false. If you do not know put a —.

The shortest route to the Continent is across the North Sea from Harwich to Ostend.

The most ancient parts of London lie south of the Thames.

In the south-east of England most of the hills are made of granite.

Test "A" involves thinking type, as also old-typed memorizing questions. The thinking type requires long or short answers and depends on the way the examinee expresses and links his ideas. The marking is invariably influenced by the subjective opinion of the examiner. Nobody now questions the objections to and drawbacks of the subjective marking, specially in a statistical measurement. The test is limited only to the knowledge of the continent of Europe and that of the states.

Test "B" is of a more general nature, but otherwise has the same defects as Test "A". Questions 207, 84 and 217 may be cited as only enumerating ones, and the other two involving the subjective element in marking.

Test "C" has been designed to test the geographical knowledge of only England and Wales. The marking is objective and the test does not require much writing; but the questions almost all test only the geographical information of bare facts, and the use of the map. The educative ability to deduce inferences from a geographical data has been neglected.

None of them is of a general type—of a nature that it could be used at any place, after a certain standard of geographical knowledge has been attained. The present is an attempt to meet the requirement, at the stage of III year senior class (age 15-16); as also to enable one to investigate into inter-correlations of the various phases of the subject.

## II. Making of the Test

As said before, a geography test should ascertain:—

- (1) the extent of general geographical knowledge;
- (2) the ability to reason from geographical data;
- (3) the understanding and the drawing of maps.

To meet these requirements the present test has been divided into four parts —

- (1) General knowledge knowledge of political divisions, their commercial and economic relations to others and the life of the people therein,
- (2) Physical knowledge knowledge of the physical forces, sun, air, water, gravitation, rotation etc., on the earth as regards winds, pressure, temperature, climate etc.,
- (3) Applied knowledge the application of acquired geographical knowledge in drawing inferences from given data,
- (4) Map Drawing

Map drawing has been chosen in preference to map reading as the latter is only another type of general knowledge test, if it requires the showing of something in the map and of applied knowledge if it involves the inference of something from the position on the map, whereas map drawing includes map reading and also it tests drawing ability and neatness

To make the test applicable over a wider area, material to cover the whole world was chosen and questions involving detailed study of smaller areas were avoided. The course in geography in the Scottish Advanced Division Schools as recommended by Scottish Committee for Research in Education (Curriculum 1931) covers in the,—

1st Year (Post Primary)—Home Area, British Isles, North America and economic Units of the world.

2nd Year (Post Primary)—Europe, South America and Africa

3rd Year (Post Primary)—Asia, Australasia, World as a whole, Distribution of English people

World's races, great religions, League of Nations and World Federations etc

For the present test the Third Year class was chosen and a test was prepared to cover as many different aspects as possible —

In general geography—Various countries with their chief ports and capitals (8, 10), products (5, 6), rivers and mountains (9), people and their

occupation (2, 3); the natural regions (1, 15); the comparative study (11, 16, 17); the general information (4, 7, 12) and its application (13, 14).

In physical geography—the solar system (6); the rotation and revolution (7, 15); temperature (14); pressure (13); winds (5); weather, climate and rainfall (1, 2, 3, 4); earthquake (8); eclipse (11); current (10); and general (9, 12).

In applied geography—Dress (16); Houses (2, 3, 4); Industry (8, 9); Commerce and Routes (10, 7); Wealth (13); and Position of Countries and Towns (11, 12, 5, 15, 16, 17 & 18).

In Map-drawing—Understanding of the common geographical terms (4); the importance of position (3); climatic zones (1) and eclipse (2).

(The paper in full is given as Appendix A. The figure in brackets in the above indicate the number of question in the paper).

The test was given as a trial test to the Third Year students of Moray House Demonstration School and the following table shows how it was worked out:—

TABLE I

*No. of items answered.*

CORRECTLY.

No. of boys giving correct answers.		Gen Geog.	Physical.	Applied.	TOTAL.
30 or over	..	2	1	1	4
Between 25 & 29	..	10	5	8	23
.. 20 & 24	..	10	5	2	17
.. 15 & 19	..	9	6	5	20
.. 10 & 14	..	8	3	2	13
.. 5 & 9	..	8	6	..	14
.. 0 & 4	..	1	6	..	7
		<hr/> 48	<hr/> 32	<hr/> 18	<hr/> 98

There were six questions in physical geography out of a total of thirty-two which were solved rightly by less than five boys, in fact there were two (3a and 12b) which were not done



by any. In applied geography there were eight questions out of eighteen which were done by more than twenty four boys out of a total of thirty, this number in general geography was ten out of a possible forty-eight.

*Table giving the average and the mean scores in various sections*

	General (48)	Physical (32)	Applied. (18)	TOTAL (98)
The mean score	27.3	16.63	13.13	61.3
The median	23.25	15.611	13.237	62.167
The 25 percentile	22.625	12.75	12.053	54.5
The 75 percentile	32.938	17.694	14.421	67.167
	6.925	3.021	1.855	8.7

The marks in the Applied section of the test indicate that the test was probably too easy for the class and those in the total suggest the same. It could be expected as the number tested was only thirty and were a selected group. It was, therefore, thought necessary to change a few questions and to arrange them in order of difficulty in each of the Sections.

To illustrate and explain the changes it is better to give a few examples,

(a) General Geography. Items involved in the original test were forty eight, nearly 50 per cent of the whole total and this overshadowed the knowledge in others, it was, therefore, decided to reduce the number and it was brought down to thirty-seven (to 1/3rd of the total 107) keeping it a little above the other sections because of the supposed importance of the section.

Examples —

Question 7 (in the original)—Name the country which governs —

- (a) Malta (23)
- (b) Philippines (23)
- (c) Formosa (7)

It was changed to Question 4 in the final, with Corsica changed for Philippines and Iceland for Formosa.

Question 10—Name the capital and one large port of:—

		<i>Capital</i>	<i>Port</i>
Peru	(6, 0)	.....	.....
Australia	(10, 18)	.....	.....
Egypt	(21, 18)	.....	.....

It was kept as question 6 with Mexico changed for Peru.

Question 17—Of the following pairs underline the one which you think to be the colder of the two in winter:—

Norway	... Sweden	(15)
San Francisco	... Quebec	(27)
Durban	... Pretoria	(14)

The question was subject to element of chance and was supposed to be of a higher standard. It was changed to assume the following form and retained as Question 13:—

Norway is warmer than Sweden in winter because—

- (a) It is further north.
- (b) Winds blow from the east.
- (c) The gulf-stream flows along its coast.
- (d) It has higher mountains.
- (e) It is near Great Britain.

Which is the best reason? Answer simply (a) or (b) or (c) or (d) or (e) .....

Question 11—In each of the following pairs underline the one which you think to be more industrialised.

Delhi and Bombay.	... ..	(25)
Southern Uplands and Scottish Lowlands.		(17)
Chilian Desert and Chilian Uplands.	... ..	(19)

It was also subject to element of chance and was deleted.

(b) Physical Geography: The items involved in the original test were thirty-two,—one third of the whole; the general section being brought down to this ratio in the final test. This

section was also correspondingly reduced, and in the final test it has twenty seven items (Total 107, ratio 1/4)

Examples —

Question 2—Which one of the two places will be considered drier with 30" annual rainfall

Edinburgh or New Orleans (17)

The question though answered rightly by seventeen is not clear and is also open to chance. It was eliminated in the final form of the test

Question 12—State where the snowline will be the highest and where the lowest (1 & 0)

Himalayas, Alps, Scandinavians and Andes near the Equator

Highest

Lowest

This question was not answered mostly because snowline was not properly understood, but to provide head room in the test it was retained, the snowline being explained fully (Question 26 in the final form)

Questions 7, 8 & 9 were made questions 1st, 2nd and 3rd in the revised test

(c) Applied Geography. There were only eighteen questions asked, this number was raised to twenty-one in the final form. In the original the examinee had to choose the correct reason out of the three given in each question, in the revised form he was to choose the best reason which he thought to be correct out of the four given. This increased the difficulty of the test and the easy nature of the section was rectified to a considerable degree. The order of difficulty was preserved on the whole except that questions of the same nature were interspersed with other questions e.g., Questions 2, 3, 4 of the original referring to houses of people in different countries were changed to Questions 1, 12 and 20 in the final form

(d) Map drawing. This section was not given in the trial test. It was thought that Question 2 to illustrate the Solar or Lunar eclipse by a diagram was rather too difficult and required a considerable time, for it was substituted Question 51 (final form) to draw a map of your classroom. Similarly Question 3 about sketch diagrams illustrating the importance of the positions of Genoa, Chicago and Buenos Ayres was regarded a bit lengthy, the form of the question was retained but Southampton was substituted for the original three. (The final form is given as Appendix B)

## EDITORIAL NOTES

BY

K. S. VAKIL, MEd, FRGS,

*Principal, Maharani Tarabai Teachers' College, Kolhapur*

Sir George Anderson, formerly Educational Commissioner with the Government of India, speaking on Indian Education at the Conference of Educational Associations held in London at the beginning of this year, observed that 'mere multiplication of large numbers of schools, small, inefficient, only too often of the one teacher variety, was of little value in the grim struggle against the forces of illiteracy and that the solution lay rather in the direction of a comparatively small number of central schools with feeder schools in neighbouring village.' It is difficult, however, for any Indian interested in the advance of his country to agree to this view, particularly in the times of Constitutional Reform which demand mass literacy as the *sine qua non* of its success. To meet this urgent demand, we need the introduction of compulsory education in all the provinces and rapid multiplication of schools so as to be able to place facilities for elementary education within easy reach of children in the remotest villages. Consolidation and concentration of schools in bigger villages suggested as a solution of the present problem would require abolition of schools at present existing in a number of small villages and reduction of a number of others to the inferior position of feeder schools. It is hard to imagine that any Indian animated by a desire to promote the educational advancement of his province would be ready to accept the suggestion. If large number of village schools are small, inefficient, and of the one teacher variety, the solution lies in their all round improvement—improvement of their enrolment by the introduction of compulsion, improvement of their teaching by the training of their teachers, and improvement of the numerical strength of their staff by the employment of a sufficient number of teachers in them. It would not at all be difficult to effect these improvements, if the authorities were to realise their urgency and provide the additional funds needed to carry them out. They never have any difficulty in finding additional funds needed for the improvement of what are known as 'security services'.

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The suggestion for the classification of primary schools into central schools and feeder schools is far from acceptable, since it implies classification of villages into superior and inferior for educational purposes—into villages fit to be served by others and villages fit to serve them. Such basis for classification is obviously unpalatable and cannot be accepted in these times when every village or urban community claims equality of treatment in matters of general administration.

What we need are village schools of different grades. In smaller villages, we need schools aiming at little more than literacy through a simpler and more elastic course of elementary education covering a shorter period for children up to the age of 11 years—complete in itself, so far as it goes, but, at the same time, leaving the door open to any of its pupils who may choose to seek a higher course of education in a bigger school in the neighbourhood. In bigger villages, we need schools giving a complete course of primary education of about six years' duration—offering, in addition to the ordinary subjects, a working knowledge of English and vocational instruction in practical agriculture, commerce, or industry, according to local needs.

The need for these two grades of primary schools is great. The first would be practically the type suitable for smaller villages where attendance of children would have to be generally compelled, while the second would be the type suitable for larger villages where the people have come to appreciate the need and value of education for their children.

\* \* \* \* \*

Sir Ahmerst Selby-Bigge, formerly Permanent Secretary to the Board of Education, England, and a member of the Hartog Committee, writing recently on Indian Education, noted the same—"the casual multiplication of small, inefficient, and often ephemeral schools"—as the defect of primary education. While reading such public criticisms of Indian Education, one cannot help asking who were responsible for the establishment of the system which is now so much under fire at the hands of foreign experts. Were not British officers of the Imperial service responsible for it? It is they who framed and founded the system—not Indian Ministers of Education nor Indian Officers at present in service who only recently took over the system as it was handed on to them by their British predecessors. As a matter of fact, education began in this country with the founding of central schools in bigger places and of feeder schools in smaller places. If this system was good, who gave it up in favour of a "casual

multiplication of small, inefficient, and often ephemeral schools", and why?

\* \* \* \* \*

A further question arises as to what has given rise to all this crop of public criticism of Indian Education by foreign experts in recent years. Is it the transfer of control of 'Education' from the hands of British administrators to those of Indian Ministers? Before the advent of Indian Ministers of Education in 1921, criticism of Indian Education was not much heard of

\* \* \* \* \*

We regret that owing to an oversight the comments of the London Times Educational supplement on Principal Seshadri's article in our last issue was printed in continuation of that article on page 8 in the last paragraph beginning with "The Former Secretary of the Indian Inter University Board". The readers will please consider that to be an appendix of the article

## HIGHER EDUCATION IN INDIA

*[By the Courtesy of the Director of Public Information, New Delhi.]*

How some Provinces are attempting by the introduction of vocational subjects such as manual training and agriculture to alter the prevailing literary character of the high school curriculum. is revealed in the report of the Educational Commissioner with the Government of India on Secondary Education in India in 1934-35.

In the Punjab there are 30 manual training centres, while agriculture is taught in a large number of secondary schools. In the Central Provinces, there are 17 manual training classes attached to high schools. Bihar refers to "a growing tendency on the part of the authorities of middle English schools to introduce vocational teaching." Six schools now teach carpentry, 12 agriculture, 7 tailoring, 3 weaving, 3 carpet making, and one each cane work, book-binding and soap-making. In Assam, all schools do some sort of manual training. The United Provinces reports that manual training is increasing in popularity, 12 more schools taking the subject, while agriculture is being taught in a few schools having the anglo-vernacular system of education. Bengal reports 50 high and middle English schools as giving instruction in manual training, while other secondary schools teach carpentry, blacksmith's work, weaving, dyeing, etc. Fifty-two teachers were given allowances for teaching agriculture in secondary schools. In Madras there were 484 manual training classes attached to various schools and colleges, with 66,315 boys and 2,123 girls. The subjects taught include wood-working, weaving, horticulture, book-binding, cardboard-making, rattan and coir work, tailoring and engraving.

The general trend of anglo-vernacular education is still mainly literary, but the need for training the hand and eye by practical work is being increasingly recognized. The aesthetic side of education is, however, generally neglected, and there is little teaching of art in the real sense and no training in aesthetic appreciation. Until this need is recognized, our secondary education at the best can only be one-sided.

### Two Systems of Secondary Education.

There are two systems of secondary education in existence—anglo-vernacular, where English is a compulsory subject, and in many Provinces still the medium of instruction, and vernacular, where instruction is given through the medium of a modern Indian language or languages.

Anglo-vernacular education is controlled in various ways. Some of the institutions are maintained directly by Government, but the majority are under private management and receive grants-in-aid from public funds. The matriculation or the school final examination colours all the educational activities of the schools and it is its generally predominantly literary character which has recently come in for criticism.

Recognition up to middle standard is given by the Education Department of the Province, but it is the University or the Board which raises to high school or Intermediate standard. Undoubtedly standards of recognition have been lowered in recent years, and an increasing number of unfit schools obtain high school status. Recognition committees have not been able to maintain the standard of aloofness from private pressure which is so necessary, and the result has been a steady increase in high schools and a corresponding increase in unfit students appearing at school leaving and matriculation examinations.

This misguided tendency, to call it nothing worse, is one of the main causes of the increase in the so-called educated unemployed. A further comment on the unwisdom of lowering the standards of recognition is afforded by the recent debacle in results in the Bombay matriculation examination, while the University's permission for private candidates to appear at the matriculation is a further cause.

### Vernacular School more practical

The vernacular middle educational system is definitely more practical. Here manual training, agriculture, and rural knowledge or rural science are subjects which have been widely introduced and framed to suit rural requirements. To quote from the report from the United Provinces "for a sum commensurate with the income of the parent the boy receives an education covering most of the subjects that he is likely to need on leaving school. The school is in or near the village, the course is designed for village life, text books and curricula alike put emphasis on the rural character of vernacular middle education. While the high school passed boy and the B.A. are generally divorced from the atmosphere of village life and definitely trained to think and act in terms of city life, the boy who passes the vernacular final examination is definitely a product of the country."

The Punjab has a large number of schools which teach agriculture. In the Central Provinces, more stress has been laid on the practical side of agricultural teaching. In the United Provinces, there are 31 manual training classes in vernacular middle schools, 36 schools where agriculture is taught, and 126 taking rural knowledge which includes agriculture. Bombay has a large number of agricultural bias schools in rural areas.

Unfortunately, however, in spite of their distinct rural and agricultural character, it cannot be said that middle vernacular schools are universally popular. Thus in Bengal "the vernacular system of education which should be the prop and stay of rural development, tends more and more to deteriorate. The thought of matriculation still dominates, with the result that a very large number of students whatever their bent and competence, flock to secondary English schools. Indeed no education, even the primary school, is popular in Bengal unless it includes some teaching in English. Over this enormous mass of institutions there is no well-organized control. Many of them are private schools and many receive no grant from public funds and escape even that measure of supervision which the receipt of grant entails."



## University Education.

So far as University education is concerned, there is generally agreement that the numbers indiscriminately crowding the University register can be reduced not indeed by refusing admission but by diverting those not suited to an academic career at an earlier stage. Unfortunately Universities depend in varying degrees on the fees of the students who attend them, and there are quite natural forebodings among the University staffs that a reduction of students will mean a reduction of staff, and thus there is a general reluctance to commit *harikari* by agreeing to a scheme of reorganization.

Amongst the new developments in University education during the year under review, mention may be made of a new University Department of Chemical Technology which has come into existence in Bombay, with two courses—Textile Chemistry and Chemical Engineering.

## Number and Enrolment.

The total enrolment in Universities, of which there are 18 in India including Burma, was 117,641, with a net increase of about 4,000 over the figure for the preceding year. Of this number the largest proportion belongs to Calcutta University which has an enrolment of 29,851, the Punjab comes next with 21,653, Bombay third with 17,494, Madras fourth with 14,757, while the smallest enrolment, which is 508, is in Annamalai.

The total number of anglo-vernacular schools for boys in British India during the year was 7,086, with an enrolment of 1,369,726, and that of vernacular schools was 5,696, with an enrolment of 747,113. The total number of boys reading in the secondary stage, class VI to end of high school stage, was 1,265,942. There has been an increase in the number of English institutions by 149, while there is a fall of 48 in vernacular schools. The increase in enrolment, however, is 42,801 in anglo-vernacular schools, while there is a decrease of 12,484 in vernacular schools. There has been a loss of no less than 58,176 in the last three years in vernacular middle schools, and it is a loss where it can least be spared. Economic causes are undoubtedly one of the reasons for the fall as rural parents could not afford even the low fees charged. The total expenditure on secondary schools for boys has increased from Rs. 6,94,75,273 to Rs. 7,06,28,258, that is, by Rs. 11 lakhs. Of this amount, Rs. 2,29,81,535 or 32.5 per cent came from Government funds. The percentage of Government contribution to total expenditure was the highest in Coorg, where it was 80.3; the North-West Frontier Provinces was second with 68.3, and the United Provinces third with 52.4. The percentage is the lowest in Bengal, with its huge system of private schools, where it is 14.0.

## Wastage.

An examination of the results at the high school or matriculation stage shows that for the whole of British India the pass percentage is only 62.4 per cent. From the figures available, it appears that this percentage is the lowest in Bombay, where it is 36.5, and the highest in Baluchistan, where it is 87.4. Low figures in certain other Provinces are 38.7 per cent in Burma, and 39.2 per cent in the Central Provinces and Berar. These are very marked variations, but a more serious matter is the deterioration in

standard from year to year. There is no scientific control of examinations or examiners, and such control is badly needed. Not only do individual examiners undertake to examine more papers than they can possibly do justice to, but there is little attempt at co-ordination. There is a definite need for a more systematic and scientific method of evaluating examination papers.

### Teachers

The percentage of trained men teachers has gone up from 57 to 57.4 by 1,056. Bombay and Bengal with their low percentages of 20.3 and 19.8 reducing the average considerably. In Bengal out of 25,778 teachers employed in secondary schools, no less than 20,806 are untrained.

There is a disposition in some quarters to belittle the fact of training for teachers. It is true that training will not make a bad teacher a good teacher, but it will make him a better teacher. In no other walk of life would unlicensed and unqualified practitioners be allowed to practice on a patient, but in education there is a disposition to allow any quack to experiment on the helpless child.

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- (3) To consolidate a public of those who, finding it impossible to be indifferent about the educational drift of India, believe that a concern for the health of educational criticism is immediately relevant to the political and economic urgencies of the time
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Printed by K. Mitra, at The Indian Press, Ltd., Allahabad.

VOL. II

No. 7

# THE INDIAN JOURNAL OF EDUCATION

MANAGING EDITOR:  
D. P. KHATTRY



JULY, 1937

ALL-INDIA FEDERATION OF  
EDUCATIONAL ASSOCIATIONS

POST-BOX 52, CAWNPORE

PRICE ANNAS EIGHT

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# Indian Journal of Education

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Vol. II

JULY 1937

Nos. 7

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## CHARACTER TRAINING IN INDIAN SCHOOLS

BY

PANDIT RAM NARAYAN MISRA, B.A.

*Extracts from the Presidential Address of the Moral and  
Religious Education Section of the All India  
Educational Conference, Gwalior.*

No subject in the domain of education is more difficult to grapple and yet more necessary to understand than that of religious and moral teaching. If education concerns life, if it aims at something more than making its recipient earn his livelihood, if it enables one to prove useful in society, it must embrace problems relating to the building up of character. If there was any age when a correct understanding of what religion is, was absolutely necessary it is this, specially in our country. Our young men are beginning to associate religion with priesthood, obscurantism, proselytization and unfortunately even with bloodshed. Are the communal riots about which our children hear so much due to religion or want of religion? His Highness the Maharaja of Gwalior represented the enlightened opinion of the country when in answer to an address presented to him by some communities in his state, he said, "I feel strongly that true religion must be one and the same for all God's creatures, and that therefore those who wage wars and shed innocent blood in the name of religion, are truly men without religion, who are still steeped in a state of barbarism."

In this paper we will not discuss as to what morality and religion are and where morality ends and religion begins; these are subjects which we leave for the philosophers to think about. As practical men we will stop only to consider as to how they can be taught and put into practice and who can do it. Religion and

morality are not outside one's person, certainly not in books or *shrines*. Ram Krishna Paramhansa beautifully expressed it when he said that while rains were predicted in calendars no one could squeeze water out of them. Religion and morality are within us, they are in evidence when we act. We are therefore, concerned with 'religion at work' or practical religion. I do admit that formal or academic teaching of religion in schools which aim at preserving a certain kind of culture is not without its use, but it is not meant for the majority of institutions that are found in India.

### Different types of schools.

In our country, as in other countries, there are different types of schools each with its distinctive features. There are Government schools which are entirely code ridden and therefore there is dead uniformity in their working. There are some that are elastic in their constitution in which boys have a reasonable measure of freedom and teachers have sufficient scope for trying educational experiments. Some are wholly and some partly residential and some provide education only to day scholars. Again there are schools communal or denominational, bearing the label of a particular caste or creed. You cannot wipe them out of existence even if you wish to.

### Problem of Character Building.

The problem of character building in each type of schools assumes a different aspect, and the nature of the responsibility of the teacher in each of them varies. We have to evolve certain common principles which may be accepted and, more or less, adopted by all. Moral training in schools is directed towards the inculcation of certain virtues and the removing of certain evil habits to contend against which every teacher has to devise some measures, if he is alert, thoughtful and courageous. In denominational schools the teaching of formal religion is binding. This has had of course, a narrowing influence, but the outlook of the students can be enlarged by introducing additional lessons covering the lives and tenets of the saints and prophets of other faiths than the one claimed by a particular school. Religions are many but Dharma is one. To teach this Dharma is to teach morality. A good teacher is one who can inspire, and adopt methods which are pleasing, attractive and persuasive. He does not ignore the naughty boy or the dull boy or the wicked boy. A school draws students from different environment with different

heredity and associations. The teacher does not try to drive them all alike as does a shepherd his sheep. He does not adopt mechanical methods. The old-world teachers, some of whom were highly esteemed and perfectly conscientious in their own way, used the rod as a panacea for all evils. Dr. Arnolds 'Birch' was supposed to be very effective in reclaiming malcontents. I knew the head of an institution who had a penal code of his own. He had fixed a particular day when he went about from class to class to inflict punishment—one stroke for using abusive language two for not doing home task, three for playing the truant, four for theft and so on. That day was a day of horror and it made the school look like a slaughter house.

### Methods of Love.

But now the rod has no place in a good school. Methods of love have taken its place. The boy is no longer a class room beast. Pin drop silence has lost its old significance. We all recognise the importance of establishing personal contact between the teacher and the taught through games, excursions, recitations, in order to elevate the moral tone of a school. In a word our conception of discipline and morality has changed, though it is not inconsistent with what our ancient sages preached and practised. According to this a child is not born 'sin defiled,' but it is a godling. Within its own sphere it has full freedom to live and move. Of course its age demands that its activities be watched and adjusted lovingly by the parents and at a later stage also by the preceptor. But it is to be done not from a distance or from a height but by establishing intimacy with it and coming down to the same level at which it stands.

In childhood I would tell a boy stories of the heroes, primarily, of his own country, but also of other countries, stories which instil feelings of heroism mixed with gentleness, firmness combined with sympathy, spirit of adventure coupled with prudence.

Then I would tell him what SHISHTACHAR is. SHISHTACHAR is etiquette plus something deeper and higher. It means the ways (Achar) of the good and the great (Shishta). I would let him know through precept and example what his behaviour should be as a son towards his brother or sister, as a sportsman, as a guest, as a host, as a pedestrian, as a driver. I would advise him to do a good turn every day. If he sees a blind man in the street or a woman in distress or a person who has lost his way,

it should be his duty to succour them. This is an elementary lesson in citizenship.

As he grows up I would stimulate his collective instinct so that he may feel proud of his hobbies, he may collect pictures, stamps, coins, leaves or whatever else he likes and may preserve them. Hobbies have not only a fascination of their own but they instruct also. Many an evil tendency could be sublimated in this way.

I would further introduce him to books attractive not only outwardly but captivating in what they contain. I would select books for him and make him select for himself out of a library approved by me. Thus he will cultivate the habit of self study (Swadhyaya) of books related to nature or to life. He will begin to observe things in nature and venerate virtue wherever found.

### The Habit of Stealing.

I would not mind occasional lapses, they are inevitable. I would try to find out why they take place at all. Take for instance the habit of stealing. I would trace its origin. Is it due to poverty or a step mother's inattention, or the spirit of adventure, misunderstood and misapplied? I knew a boy whose father was a high placed officer. The boy lived in a boarding house and the father sent him money enough to meet all his expenses. Yet the boy used to steal small things like a *dhoti*, a *lota* or a book. He was a puzzle to his teachers and to his parents. Larceny or kleptomania is a kind of mental disease in the case of some boys. Such cases cannot be treated in the ordinary way.

### Habit of Incurring Debts.

Some cases, however, require simple treatment. I knew a boy who was in the habit of incurring debts. He had laid under contribution almost all his school fellows. Loud was the complaint against him and he became the subject of criticism and harassment by the boys themselves. I noticed, that he although a village boy, had become fashionable, fond of fine clothes and fragrant oils. When the matter was brought to my notice and I found that admonition had failed I announced in the school without mentioning his name that all the fashionable belongings of a boy would be publicly sold by auction and the sale proceeds would go to his creditors. It so transpired that a short time before the sale was actually to take place all the dues were paid.

up. The boy was reclaimed, his fondness for gaudy clothes was gone and he is now prospering as a Government servant. I have had to deal with many such cases. Each case deserves special treatment and a remedy for one may not suit another. We should always remember that a great deal of cheerfulness and a greater deal of humanity is essential in judging life. Vindictiveness has no place in judging others.

### Some Useful Methods of Teaching.

The school atmosphere has a very subtle influence in determining the conduct of the boys and in developing their sense of order and inner discipline. The following are some of the methods which I have found useful:—

(1) The school may begin with an assembly, attended by all the boys classwise and by the teachers. This ensures punctuality and inspires a feeling of oneness and a sense of solidarity, in the whole school. The proceedings may start with a silent prayer. Silence even for two minutes has a wonderful effect. It conserves energy and generates strength. Whatever be the form of prayer, if it is silent, there is no danger of clash of creeds. The school prayer develops theistic feelings among the boys and checks the growth of materialistic tendencies. Religion may or may not be taught but religious spirit has to be created and the present grumbling, grabbing spirit to be arrested.

The prayer may be followed by a song in the mother tongue sung by the boys in chorus or a short recitation in English. All this may not last for more than ten minutes. In coming to and going from the place of meeting boys learn to march silently in a line.

(2) Each class may have a motto selected by the teacher. It should occupy a prominent place in the room. It should not be above the average intelligence of the boys. A good motto represents 'the ageless wisdom of all ages.' It may be the saying of a wise man from the East or the West. The presence of a good motto before the child's mind works subconsciously in making his conduct noble.

(3) The system of school prefects and class monitors elected by the boys is gaining ground all over the country, and may be given the shape of an organisation. A monitorial organisation proves very helpful in maintaining discipline and raising the tone of the school. The prefects and the monitors may hold their own meetings from time to time under the guidance of the teachers. They have to see, if the boys march

in a line when they change their class rooms, if they wear clean clothes, if their class rooms are neat and tidy, if the books are properly kept and if possible carried in bags, so that the chances of their being spoiled or stolen may be minimised. They may organise school meetings in cooperation with other boys on the occasion of various ceremonies of the school. Their cooperation be enlisted in organising exhibitions and museums and in beautifying the school compound by laying out nature study gardens. They may try minor cases of misconduct among boys, such as bullying, backbiting, violating property rights and using foul language. This will give to the boys a training in Self Government.

(4) The screen is proving of great value in education. The school may organise cinema shows to teach lessons in temperance, honesty and social service, besides those that are meant merely for imparting knowledge relating to History, Geography and other subjects. In this way lessons are made concrete and the desire of the boys to visit the street cinema is controlled.

(5) Lastly, I may mention scouting. Education is harmonious development of all the faculties of the pupils. In that all round improvement moral improvement is included. Hence education is not confined to the four walls of the school. Every child has wanderlust. He wants to see new regions and has a great proneness to face dangers. He wants to climb trees, to cross rivers, to jump over ditches. These are admirable traits and scouting is the only activity that takes note of them. Geography taught in a class room is different from geography taught under the sky or on the hills. Scouting provides for hiking rallies, camping out and other group activities. This awakens a sense of responsibility and solidarity. A scout is cheerful under all difficulties and subordinates his own interests to those of the group.

The proper utilization of one's leisure is also an education. It has a moral value, as leisure wasted weakens one's character. In this respect scouting has done immense good. A scout knows how to keep himself occupied, whenever he has nothing serious to do.

### Teacher's Task

As I have indicated above a teacher's task is very sacred. Upon him devolves the solemn duty of moulding the character of the boys—of making them good students and worthy citizens. Hence he should be a man of immense faith and fire in life, the

more so if it be his duty to impart religious or moral instruction in some form or another. The life of such a person is a source of inspiration to all those who come in contact with him.

I have enumerated only a few of the points which enable the school authorities to lift up the character of the boys and to draw out all that is best in them. More can be enumerated. I have purposely avoided controversial subjects such as sex education, co-education etc. My duty here is to initiate and invite discussion and humbly to guide the deliberations of this meeting. I hope that when we go back to our school we may feel that our visit to the Educational Conference has been a source of inspiration—an inspiration which we may communicate to our colleagues and students.



## DR MONTESSORI'S MESSAGE

MARIA MONTESSORI,

*In the Association Montessori International Bulletin*

I was never much concerned with affairs of the adult, I have therefore always kept myself apart from politics

My experience has been more with the child, and the love I bear him has always led me to take profound interest in the question of peace. Lately this interest has become active and I have entered into communication with others who struggle in this cause

What I am going to relate is not as a critic, but simply as a spectator—unversed in the matter of politics

To my untrained mind the state of peace seems chaotic, nay, I have the feeling that the very meaning of peace is unknown

I do not say this in order to criticise, nor because I am "anti" anything. Indeed, I should be contradicting the very word of peace to be "anti" some part of humanity, because being "anti" something is the first step towards conflict. No. I went as a psychologist with firm purpose to study the question of peace just as one would start studying any subject in science. I came full of hope to peer into the different mentalities which represent each peaceful attitude. With the optimism of the unaware, I received a shock, for no matter where I turned I had the rather absurd impression that the very means—the very spirits sworn to peace—would bring a speedier realisation of the war they feared. I attended at peace gatherings where people had come from all over the world, known everywhere as fighters for peace, convening there to show masses of the world that public opinion stood for, and wished for, peace. In their midst arose one, just arrived from the battlefield, who, with his fist aloft, declared that his side was assuring peace for the whole of Europe, and perhaps for the whole world. Nobody seemed to notice this strange contradiction, on the contrary, the whole mass of public arose to applaud in a frenzy of enthusiasm.

Later I read of Christian bishops, who, in the Name of that same God Who, when clapped, presented His other cheek, declared that killing was something necessary if one was to defend Christendom, peace and civilisation. Were these people in

earnest? Could these people really think that they were able to persuade the public that they had peace at heart?

Such was the first impression: but going deeper into the matter, I was surprised to find that each group was as sincere in its beliefs as it was thoroughly convinced that the others were hypocritical. "How can you tell me that they are in earnest?" some of them would say. "They preach a Christian religion; they preach forgiveness, not to kill, to protect the oppressed from the tyrants." Yet they bless the arms of despots who are going to slay their unarmed poor.

God tells us to forgive men, said others. But these are not men; they are devils. They destroy every moral; they abolish the family; they burn churches and the images of God. "No, indeed, they are the hordes of the evil one that is trying to engulf the flock of Christ."

Among the nations, if we look at each country in turn, we shall see not only the governments, but opposing parties, supplying themselves with the most terrible means of destruction "in order to uphold the peace of the world." "For," they say, "if one nation is armed and the other is not, the latter's weakness will be a temptation to the former, who will be tempted to make war." Or again, "If our party does not make adherents to its ideal and strike out in time, it will not be possible to stop the wave of anarchy, of disorder and destruction that threatens to engulf the peaceful citizen."

On the other hand, you hear others say that if freedom-loving people do not unite for peace, the whole world will become a mass of slaves, undergoing all kinds of humiliations, being ruled even in the intimacies of family life. So, if you go from one to the other; if you really take the trouble to identify yourself with the point of view of each; you will find that each one's logic seems to be limpid truth; each one perfectly right; and each group really convinced of the righteousness of its own views, and persuaded that in order to have real peace they must make, or prepare for, war.

Such was the impression produced upon my ignorance and my inexperience. What was called peace appeared to be a turmoil of passion and hate, or, what was worse, a smiling acquiescence covering deep mistrust.

But how I admire such people as Lord Cecil, Herriot, who, in the tempest of passions, govern their ship and bring it safe, gathering way under adverse conditions.

How brave of them to continue when all seem to have lost faith! The League of Nations will not disappear, and one day,

through the sacrifice of such people as they, through their courage and constant preaching, the masses will be able to influence their governments to make of the League the organisation everyone shall respect

Yet I cannot but feel that peace should not limit itself to the wish of people who hold different views, a period between two wars in which the spent monster rests and takes on energy for a new and more terrible effort. Peace must become a science, something positive, analysed in all its factors, each carefully studied and provided for. Steps have begun on these lines, efforts towards political accords and the study of economical factors to facilitate them. But here also I have the feeling that these, even if successful, will be but external and temporary remedies. They are the emergency cure of the symptoms of a malady which is causing them all. By giving external cures to isolated symptoms, such as headache, or the sense of suffocation, one does not cure the heart disease that causes them. And no matter how often these aches are calmed, they will always reproduce themselves if the central cause is not also removed.

Peace is essentially a human problem and the main factor of any human problem is humanity itself. The formation and the preparation of the individual is, therefore, for its solution even more important than politics or economy. The mastery of the human soul must be foremost.

The fact that in spite of the thousands of years of civilisation, two moral codes are still in evidence, one of them condemning slaughter and the other extolling it, shows that the human soul has not advanced to any material extent and is to day as unknown to man in its psychological make up as it was in those far off periods of which Homer sings.

Humanity should, therefore, turn attention upon itself, with the interest that it placed upon external things which permitted it to make gigantic steps in external civilisation so that it can now out fly the birds and be heard across continents when speaking only in a whisper. Humanity must take humanity into consideration. Education must no longer remain in the condition of a secondary interest as regards the great social problems of to day. This is wholly understood by the totalitarian nations which use the school to imbue the children and youth of their country with the ideas of their respective regime.

The soul of man must be studied from its origin, its development protected as zealously as the nation itself for whose protection great armaments are being produced in every country of the world.

I wish that, for the effort of peace, I had a powerful organisation to offer. But I have nothing. I have only the weak voice of the child which is striving not to be stifled by the turmoil of machines and the overwhelming power of a frenzied humanity. But if that weak voice can make itself heard, it will point out a new way towards peace; show the seedling of a new humanity, or rather of humanity as it should be, were it not distorted from the sacred paths that God has pointed out. It is the child, fresh, unspoiled, who, given the means, has revealed the psychic laws of growth, who has shown that he needs no oppression to be disciplined and efficient, who will be able to lead our feet towards a path of peace different from that which is pursued at present; a path different from that of the adult, where even in efforts of forgiveness resentment prevails such as to impede us from seeing the real significance of the word "Peace."

## PROGRESS AND SPIRIT OF EDUCATION DURING THE MIDDLE AGES

BY  
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One of the foremost and eminent of Roman Educationists was Marcus Fabius Quintilianus. He was born at Calagurris in Spain about the year 35 A D. Not much is known about the early school days of Quintilianus. The record of his activity begins with his middle age when he was about 26 years old. For about seven years he was in the service of the future emperor Galba with whom he returned to the Capital. Quintilianus was a first rate Rhetorician, and was for about twenty years the headmaster of one of the foremost schools of Oratory in Rome. At the age of fifty, he gave up all teaching work, and wanted to devote the rest of his life to compose his great work entitled *Institutio Oratoria*. In writing this book, he drew inspiration from Domitius and Cicero. The work deals mainly with liberal education, and was written with the explicit object of producing good Orators. To accomplish this Quintilianus thought that training by an experienced master of language was very essential. It was also equally important that the pupil and the teacher should be in intimate contact with each other, so that as soon as a pupil pronounced a particular word incorrectly, he should at once be corrected, and checked in order to avoid the formation of a habit.

According to Quintilianus, for the purpose of effective teaching the number of students in a particular class should neither be too large nor too small. Both factors are not conducive from the point of view of a teacher. In a class of fewer boys the teacher's enthusiasm is not sufficiently aroused, while in a bigger class, he is unable to devote much of his attention to individual students, without which perfect development is greatly impeded and progress retarded. In a congested class the teacher is also likely to feel cramped and overburdened, which chokes and stifles the pure educational atmosphere.

The Course of instruction according to him was divided into three Sections:

- (a) *Litrator*, which comprised elementary instruction imparted in the home upto the age of seven.
- (b) *Grammaticus*, which comprised grounding in literary criticism and scholarship, and development of accuracy in Grammar. The object of the second section of instruction was two-fold namely the moral and the intellectual.
- (c) *Rhetor*, which gave a practical drill in Oratory:

The Educational principles of Quintilianus may be summed up as follows:

1. General education should be important and interesting.
2. All knowledge properly imbibed is useful and tends to widen and promote culture.
3. Education should be imparted according to a particular plan, and not in a haphazard fashion.

Above all the aim and object of Quintilian Education was mainly practical. He advocated education for its own sake, and not for the sake of political ends.

The next stage in the development of Education during the middle Ages comprised in the gradual fusion of the Greeks, the Romans and the Christian elements with the Germans. In order to make the process of assimilation a success the church stood out as the chief guide and schoolmaster of the Germanic Hosts. In fact the need for the church was most imperative during the transitional period of absorption, and the peculiar state of the Roman Society, which had become thoroughly degraded and demoralised on account of excessive luxury. Some thing strong and powerful was needed to save the society from degradation and depravity. Many Christians feeling quite disgusted with the state of affairs fled away from the society into the deserts of Egypt where they devoted their life to Asceticism. In due course of time, about the middle of the 11th century they organised a system of Monastries. In these monastries the monks lived together, but confined themselves to separate cells. Gradually the elementary form of monasticism founded by Pachomius was extended into Europe. As the number of the monastries swelled up, it automatically resulted in the creation of a better atmosphere of learning, necessitating as it did in the collection and reproduc-

tion of manuscripts. The monastic system achieved a great success. Each monastery developed its own library, and a sort of a book trade on a miniature scale was established. As a result of the activities of the monks in the field of education several newer and original writings were added on to the older one. With the object of founding the monastic system of learning on a sounder basis, schools inside the monasteries were established for the purposes of maintaining chastity and obedience. Up till the 12th century these monasteries went on in their own humble manner gaining knowledge of the seven liberal arts namely grammar, rhetoric, dialectic, arithmetic, geometry, music and astronomy. After the 12th century, however, the scope of these subjects was considerably enlarged, and some progress was made in Mathematics, Astronomy and Physics. Occasionally however, these monasteries suffered from periodic lapses. In ascertaining the importance of monasticism, it may be pointed out that although it served a very useful purpose of saving the society at a very critical juncture from vice and corruption, and in the preservation of education and learning, yet on account of its spirit of orthodoxy, and consequently its opposition to classical literature and Science, it did not achieve the maximum that it could.

The progress towards learning and education during the middle ages, which was started by the monastic, was reinforced by Charlemagne with the result that the monastic and Cathedral schools not only offered a complete elementary course, but sometimes also afforded considerable facility in higher education. *In order to popularise Education tuition was generally free. Education was almost universal and compulsory.*

Further extension in Education during the Middle Ages was made by Alfred the Great (848—901). During his reign the schools improved both in number and quality. He personally made a continental tour in order to come in contact with men of reputation and learning, who would help him in improving the schools. With this enthusiasm he was able to restore much of the old learning.

The next step in the promotion of Education was taken by the Mohammadans. Their founder Mohammad, though himself an illiterate person took a very keen interest in the dissemination of knowledge. The Koran or the sacred book of Moslem faith was committed to writing in about 650. Religious teachings aroused further interest in higher education as a result of which a definite demand for the so called colleges in which higher education was to be imparted was felt. A number of Moorish institutions sprang up in leading places with facilities for training in

Mathematics, Sciences and Philosophy. These institutions aroused a corresponding stimulus for learning in the already existing Christians schools. A sort of healthy rivalry was soon created with the result that the system introduced Aristotle into Christianity once more. The teachings imparted in the Christian institutions were both mystic and scholastic, and brought about a considerable awakening both mental and moral, and thus actually paved the way for the Renaissance and the Reformation.

It would not be out of place here to review briefly the rise of the mediaeval universities, and the influence which they had in bringing about the awakening.

The mediaeval universities grew out of the schools in which the number of students became so large that they became unmanageable under the ordinary school management. Although we are surprised to-day to find that in India there are as many as about nineteen Universities, it would be of interest to know that there were at least seventy-nine Universities in Europe at the time of Renaissance. All these Universities were important in their own way, and lots of privileges were enjoyed both by the teachers and the students, who were held in great esteem by popes, emperors, kings, feudal lords and municipalities. The mediaeval Universities enjoyed a complete independence. They had special courts of their own independent of Civil jurisdiction, and complete Autonomy in all their internal affairs. Teachers connected with University teaching enjoyed exemption from all kinds of Taxes.

As regards the internal organisation of the universities there were deans in the different faculties of learning very much allied to the system we have at the present day, but the system as a whole was very much less cumbersome than the modern system. This is probably due to the fact that the training imparted in the ancient universities was very fixed and formal. The whole spirit of studies was purely dogmatic and was not permeated by any spirit of Research. The methods of teaching were correspondingly stereotyped.



# ADMINISTRATIVE OBSTACLES TO EDUCATIONAL PROGRESS

BY

CARRDILL R. REED,

*Superintendent of Schools, Minneapolis*

The great task of the school administrator is to do something about the inconsistencies which exist in every school system. He must examine critically and seek to coordinate and reconcile conflicting points of view relative to educational objectives, curriculums, training, selection, and improvement of teachers, classification of students, methods of teaching, and the corresponding problems of school finance.

We can all agree that the school must create in the young a more dynamic intelligence, a surer initiative, a broader, more social outlook, and a well rounded and well disciplined character. The elementary schools have made great progress in recent years in the application of a new philosophy. Not only are the elementary schools doing a better job in teaching children to read, write, and do problems in arithmetic, but in addition they are acquainting children with the relationship between these skills and life situations, which makes it possible for them to live and work effectively with others.

For some years we have been attempting to educate all the children of all the people, to increase the holding power of the school, and to make the school more effective in enabling each child to meet life situations and problems. We have been saying that the whole child goes to school, that it is the job of the school to educate him socially, physically, morally, as well as intellectually. The attempt to achieve these aims has brought about many practical problems which must be solved.

It is apparent that we must have a broader and richer school curriculum, that we must have a better system of recording facts about the individual child, that we must have different standards of promotion and of reporting pupil achievement.

*School marks*—In spite of these needs, most school systems are still basing promotion on the amount of subject matter covered or on the degree of perfection with which a child can memorize certain facts or so many pages from a textbook. School

records have changed very little in the last 25 years. Parents still demand report cards which measure academic achievement and set up keen competition for grades.

*Grade levels and grade designations.*—We accept the theory that a child's education should be continuous from the kindergarten through the university, with as little waste motion and as few breaks as possible. And yet we base promotion from the first grade on ability to read. A large percentage of children who through lack of maturity have difficulty in mastering this, the most difficult task they will meet in their lives, are failed and kept back to repeat the work. The habit of failure is established at the beginning of school life, and we agree this is the worst thing which can happen to any child. Studies have shown us that repeating a grade seldom helps and the repetition of many grades awakens a resentment which may lead to delinquency.

*Size of class.*—Long ago we accepted the principle that education should be adjusted to meet the needs and interests of the individual child. Nevertheless, teaching continues to be quite generally a matter of mass production. We have succeeded in rationalizing to some extent by studies which seem to prove that large classes are just as effective in getting educational results as small classes. However, these tests were based on factual learning and proved nothing. We all realize that a child can get more individual attention and better educational opportunity in a class of 30 than in a class of 40, but on account of reduced school revenues we have continued to increase the size of classes.

*The curriculum.*—We have come to regard the curriculum as the sum total of the actual experiences which children should have under the guidance of the school. We consider that the fundamental aim of the school is the development of the personality of the individual child. While we are saying this, our practice indicates that the curriculum is still regarded as so many subjects which are largely unrelated to the lives of the children. Less than a score of cities are attempting to solve this curriculum problem in the light of the newer philosophy of education. In most of these cities, the greatest obstacle to success in building a new curriculum is the old curriculum itself, with its rigid subject-matter requirements. We cannot make up our minds to part with the old and to turn our attention to the child.

For the last 50 years we have been moving away from a subject-centered curriculum toward a society-centered program. More adequate information about how learning takes place and

more scientific knowledge about child development and maturation are available. All signs seem to indicate that we shall continue to travel toward a program based on the social and individual needs of the child. The school administrator should center his attention on moving in this direction rather than on a smoothly running administrative machine. We need philosophers because they challenge and stimulate us to our best efforts, but we must invite the teachers to the council table for cooperative thinking concerning these problems.

—THE EDUCATION DIGEST

# PROGRESS OF PSYCHOLOGY IN INDIA

BY

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## I. Modern Interest In The Study of Human Nature.

There have been periods in the history of civilization when people showed unusual interest in understanding man and his institutions. One such period has been the fourth century B.C. in the Ancient Greece when man became the subject of inquiry by learned men of the age who tried to understand both the sociological aspect and the psychological aspect of human nature. The Renaissance in Europe is another example of the intensification of interest in man. The Christian populace of Europe accustomed to look heavenwards during the middle ages began to take 'humanistic' interest in man and his potentialities. What are the forces which orient thoughts of a people towards man in a particular period is a very interesting inquiry. We shall, however, not pause here to pursue the inquiry, but shall pass on to point out the unprecedented interest in understanding human nature shown by the modern generation. This eagerness of the modern man in obtaining scientific knowledge about human nature is evidenced by the fact that half-established facts and provisional hypotheses of psychology easily find a currency in the popular press and literature as well-established truths. The words like 'complex,' 'repression,' 'unconscious,' 'conditioned reflex'—these and many other terms having vague connotation for the experts have been assimilated by the popular vocabulary as words with very definite meaning giving scientific knowledge of human nature. Not only that. To take the psychological (human) point of view in all the spheres of cultural life has become a dominant feature of the modern mind. This tendency of the age has profoundly influenced our fiction wherein a social situation is created merely to dissect and describe human motives and impulses. What is true of literature is true of other departments of knowledge. Not long ago I read a book on theoretical physics by a Nobel prize scientist who reviewed the various

theories of physics in the light of human temperament. Theories of Ethics and Aesthetics, of Politics and Sociology are being revised in the light of the knowledge that is available at present about the mental processes. Besides this, these systems of knowledge clamour for more feeding on psychology and frequently create problems for psychology. In pedagogy the psychological point of view of education has now been securely established. From these aspects, let us come to the craving that the average man has for psychology. The zeal with which people buy costly courses on personality psychology, Pelmenism betokens the great need for self knowledge felt by the cultured people of our generation. How has psychology met the demands laid upon it by specialists and laymen? An attempt is made in what follows to review the progress of the new science in India from this point of view.

## II Status of Psychology in Indian Universities.

The teaching of psychology in the universities and colleges of this country has been subordinated to the philosophy, departments of these institutions. Psychology has been taught here as a part of the courses of instructions in philosophy. The general outlook of philosophy has therefore coloured the teaching and contents of courses of instructions in psychology. A philosopher is primarily interested in general concepts in the ultimate nature of reality and in metaphysical problems. His methods are speculative and critical. He cannot suffer to have unfinished picture of the world and is not interested in concrete details. Naturally enough this way of thinking profoundly influenced the teaching of psychology. Consequently the psychology taught in colleges gave a generalized and theoretical picture of mind which however interesting it may be, is useless for practical purposes as theoretical biology is for medicine and theoretical physics for understanding the structure of a radio set. Evidently such a course in psychology has helped little in solving the problems which have to be faced by the men and women of our times. What was needed was the knowledge of human nature based on observation giving concrete details of the operation of the various mental abilities in the many concrete situations. Such a knowledge could come not by speculative methods but only by the empirical methods. The scientific method of investigation was successfully employed in the various departments of physical science. It was high time that the same method should be extended to the study of man and his institution.

### III. Development of the Laboratory Movement in Psychology.

Though the teaching of experimental psychology in India dates back to 1904, the first laboratory of experimental psychology was opened in India in 1916 by the Calcutta University. Besides offering courses of instructions in the various aspects of scientific psychology upto M.Sc. standard, the members of the faculty of experimental psychology associated with the laboratory undertook investigation in some psychological problems. Abstracts of some of the research work done in this laboratory have been published in the annual report of the Indian Science Congress and a number of these researches in details have been published in the Indian Journal of psychology. The main trend of research work done in this laboratory was on the Wundtian traditions as modified in England and America. The problems related to 'sensations,' 'reaction time,' 'attention,' and 'memory' have been tackled in the laboratory in considerable details. The instructions in M.Sc. include courses on physiological psychology, animal psychology, child and educational psychology, psychiatry and psycho-analysis.

Dacca followed Calcutta's lead in opening a laboratory of experimental psychology. A number of papers have been contributed by the staff of this laboratory. In 1925 another laboratory of Experimental Psychology was opened at Mysore. Dr. M. V. Gopala Swami the Director of the Mysore Laboratory had already made a name for himself through his research on 'Learning.' From the various accounts of the Mysore laboratory that have reached me, I can say that the research work conducted in the Mysore laboratory has been mainly directed on pedagogical psychology and the allied problems. The laboratory of psychology at F. C. College, Lahore was established in 1926. Dr. C. H. Rice, the then director of the laboratory directed his efforts towards preparing Hindustani version of the Binet-Simon Intelligence tests. As a result of his pioneering efforts a point scale Hindustani Binet Test of Intelligence was prepared and is extensively used in the Hindustani speaking areas. A Punjabi version of the same has also been made. Courses of instruction offered by the Lahore Laboratories are upto M.A. standard and include general and experimental psychology, social educational, and abnormal psychology. Laboratories of Psychology have also been established at Patna and Lucknow.

The contribution of the laboratory movement to Psychology could be summed up now. These laboratories brought a change

of attitude towards the study of man. The laboratory psychology diverted the attention of the students from the ultimate problem of mind to the day to day concrete problems of human behaviour. It substituted experimental approach to the subject for the metaphysical and speculative approach. These laboratories disseminated accurate and scientific knowledge about the mental life of man. The pioneers of experimental psychology in Germany where it took its birth, were the men who were primarily interested in the study of higher nervous system. The problems of psychology first to receive attention were therefore elementary conscious processes. Simple processes like sensation and feeling were studied at first. Early experimental psychology had very little to say about the higher mental life. Again the laboratories made considerable contribution to the research on these problems. The 'laboratory' Psychologist refined the technique of Psychological observation and devised complicated instruments and appliances to catch for observation the undetected, the subtle, and elusive mental processes. Some of these appliances were later on adopted by the medical men for diagnostic purposes as also by the police to detect crimes.

#### IV The Contribution of the Training Colleges.

The second impetus to the growth of scientific psychology has come from the work at the training colleges. Since the days of Pestalozzi there has been a great demand for the knowledge about the child's mind. Some sort of psychology has always been offered at the training colleges for teachers. With the accumulation of scientific psychology the courses of instruction in training colleges began to include more of scientific psychology in the B.T. and L.T. instruction. Some of the pioneering colleges introduced a laboratory course in psychology in the B.T. course. At some places research in educational measurements has been undertaken. The problem of measurement of language ability attracted Dr West's attention in 1922 and the principles he discovered have ever been employed for the teaching of English outside India also. Dr Manry's tests of educational achievement, Dr West's researches in measurement, the work of Dacca College, Dr Menzel's researches in the frequency of Hindi words in primers and many other similar research projects have contributed much to our knowledge of human psychology. It is hoped that the newly created M. Ed. degree at Bombay University will give more impetus to the researches of a similar kind.

## V. Psycho-analysis in India.

Another and rather important contribution that has come to the modern Psychology is from the study of abnormal persons. Persons suffering from mental diseases were regarded as possessed of evil spirits. As a result of this they were feared and cruelly treated. It was only during the nineteenth century that the people began to interest themselves in the scientific treatment of these diseases, Pinel, the French physician was the first one to give a humane treatment to such patients. Since then, the causes and diagnosis of the mental diseases have systematically been investigated into and the results of all these investigations have added to our knowledge of the operation of the normal mind. The work of Sigmund Freud in this direction has been of outstanding merit. Abnormal states of mind according to Freud develop when there is a repression of the ideas to which emotional drives are ordinarily expressed. These repressed ideas express themselves through slips, errors, dreams and mental conflict. The mechanisms which produce abnormal states are also at the back of religious ceremonies, taboos and art. These views of Freud have very much bridged the gulf between the normal and the abnormal and have at the same time given us the clue to the understanding of the hitherto inexplicable facts of our social and cultural life. Psycho-analysis regards various manifestations of cultural life as resulting from repression. Psycho-analysis as a method of probing into the unconscious life of the individual carefully studies the individual with a view to discover the interaction of the social milieu and the individual. As a method of observation it has given us one other instrument of scientific research as also of mental health. Psycho-analysis has deepened our knowledge about man and his ethical and social institutions. But the greatest influence that Psycho-analysis has exercised on the modern mind consists in changing our values, in creating new ethics and a new outlook.

The Indian branch of international Psycho-analytic society was established in 1926 with its head office in Calcutta. Its members are scattered all over India. The activities of the society consists in training suitable persons as Psycho-analysts. Besides this many individual members of this society have applied the technique of Psycho-analysis to the many practices of the Hindu religious mythology, communal tension and other problems. All this has given new insight into the cultural life of our country.



## VI. Child Guidance Clinic and Mental Hygiene Movement in India.

The last line of approach to the development of modern psychology in India is through the Mental Hygiene movement. That prevention is better than cure is a familiar catch word in connection with the physical illness. The same is true of the mental diseases. Psychologists tell us that most of the mental suffering is due to a lack of proper training of character in early life. Many of the troubles befalling the adults could be avoided by taking charge of their life in childhood. Again some unhappiness in life is due to the ignorance of our impulsive life, vocational maladjustments, and our inability to understand the critical periods of life. In order to broadcast information on all these points the Mental Hygiene Association was inaugurated in India in about 1925 with its head quarters at Ranchi. There is a magazine published quarterly by this association.

Under the auspices of the Mental Hygiene Association a psychological clinic was started in Calcutta in 1930 at the Belgachia Medical College. This clinic is open to outdoor patients thrice in the week. In the beginning of this year another clinic was opened by the psychology department of Forman Christian College, Lahore. A third clinic has been announced by a trained psychoanalyst at Delhi. Besides developing the technique of influencing the behaviour of the child, these clinics have evolved a scheme and method of child study which stresses the necessity of observing children in their social and physical settings. Not only that. These clinics shall fast become the nucleus of re-educating the parents and community at large and thereby establishing new values and new ethical standards.

## VII. The Present Status of Psychology.

The above survey of the expansion of Psychology is likely to give a very hopeful and optimistic view of the achievement of the new science. It has certainly made valuable progress within the last two decades in this country and has made useful contribution to the sister sciences. But we must not forget the fact that the new science is still in its infancy and the manifold investigations made in Psychology from the various angles still remain uncoordinated above all, the old theological and philosophical notions of mind are shadowing the scientific Psychology even to day like 'Karma' and hampering its progress. The modern Psychologists are divided into schools, each of which has its own nomenclature and terminology and the point of view of the one school

seems to be foreign to the other. Again the technique of experimentation into higher mental life is still crude. A mental event is determined by so many variables that it becomes a hopeless task to control all the variables. To a pessimist the Psychology appears to be uncertain of its mission. In spite of all these unfavourable comments the two achievements of modern Psychology cannot be ignored. Number one it is fast becoming empirical. To quote the words of my teacher Dr. N. N. Sengupta. "In the fluid state in which our science is at present moment, it would be more useful for one to be equipped with a swimming belt of independent observation than to have a resting place, the slight prominences of theories ever threatened to be flooded over." Number two the modern propaganda and talk of Psychology has encouraged the new standpoint in the various disciplines of science the Psychological point of view and the human point of view. When discussing sociology, political science, literature we are apt to adopt the sociological, the political and the literary point of view. We are apt to forget that all these are the creation of man and are chary of giving recognition to the human and the psychological point of view in our discussion of these subjects. Psychology being the science of human behaviour has to be consulted in all these sciences and happily enough, whenever it has been consulted it has given valuable advice.

### VIII. Psychology and Values.

What will the effect and value of the Psychological point view in our modern culture, is a complicated question to be attempted here in details but a passing reference must be made as it is relevant to our present discussion. The advancement of other sciences resulted in giving the control of natural forces in the hands of man. This control enabled him to satisfy his desires in an adequate way. But very often this control over the physical forces of nature has been utilized for destructive purposes. In spite of so much power over nature that man has wielded, there is misery, poverty, crime and hunger in all the parts of the globe. It is on account of intolerance, fear, suspicion, cruelty in human nature that we are disfiguring civilization. The effect of Psychology in human civilization is going to be of a different kind. Through the increase in self-knowledge, man's own desires will be modified. The natural sciences have helped to satisfy the various human desires. Psychology is going to annihilate the unnecessary, irrelevant and irrational desires. Much of what is a negative reaction and avoidance in religion and morality will be substituted by more creative, positive and saner values.

is entrusted to persons who have had no laboratory training and who have had no research work to their credit. Thus there has been very few openings for the trained psychologists in this country

Every new science requires a favourable atmosphere for its growth and prosperity. Without this no science can flourish. The progress of Psychology may help to save the critical problems the civilized world is facing to-day. The critical problems can be summed up as the problem of human relationship and certainly psychology has a word to offer about it.

### **X. A few Suggestions for Promoting the Progress of Psychology.**

I shall conclude by suggesting a few means of creating favourable atmosphere for psychology in India.

As I was just saying we should not expect much from the Government to begin with. But it is worthwhile persuading the philanthropists in this country to invest money in establishing psychological clinics, in starting nation-wide movement for vocational guidance and in supporting research in social psychology, education and sociology. I am sure that if one experiment of this nature is successfully tried, the Government recognition for this work will not lag behind. This requires individual initiative.

The second means for promoting Psychological research is through schools and training colleges. The teacher remains in active touch with the child for a comparatively longer period than the laboratory psychologist. One of the much needed reform in the schools is to have teachers with a broader vision of the child and education beyond the teaching of subjects. We need teachers who would pick up the technique of scientific observation and would apply that to the observation of children. The teacher psychologists in a way has a better grasp of the child's mind than the laboratory psychologist.

I know that most of the teachers are kept so busy during the school hours that they have no time to develop this hobby of research in psychological and educational problems. For this I would suggest some of the progressive schools employing a psychologist. In order to keep himself in touch with the children he should have some teaching duties also. But the main function of a school psychologist should be:

- (1) to study special children; (a) children who are backward in educational achievement and (b) children

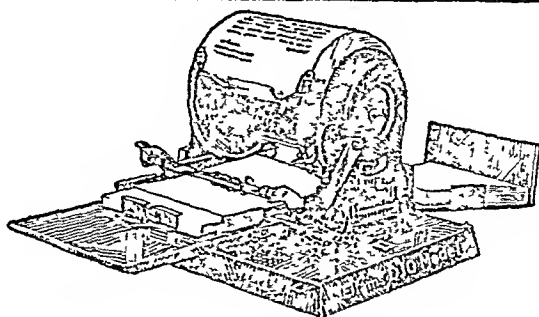
who have mental difficulties and show anti social behaviour

- (2) to make a thorough study of the personality, temperament, sociability, intelligence and other abilities of each child
- (3) To gauge the precise influence of the home and family life on the child
- (4) To standardize achievement and intelligence test.

The work of such a psychologist is bound to be of profound value to the educationists and others interested in improving the human values in our civilization

Lastly I would suggest the creation of a body for the co-ordination of various efforts made throughout India to appreciate and promote the advancement of psychology. The workers in this field are so few and far between. There are many problems such as discovery of the norms for various mental abilities, standardization for tests, which can be solved only if a number of workers cooperate. The mutual give and take in thought is nowhere felt more than in psychology today. No other body is more fitted to do this than the present body under whose auspices we are meeting.

I have tried to stress this morning the necessity of nourishing the young science of Psychology the science which emphasizes the value of personality in our civilization. There are many forces which are unfavourable to the growth of the new science but these should not dishearten us.



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( Edited and Published by the All India Federation of Educational Associations, Post Box 52, Cawnpore )

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- (1) To act as an information Centre for all matters relating to Indian Education
- (2) To encourage scientific investigation in educational sphere and to stimulate statistical enquiries or those relating to experimental projects.
- (3) To consolidate a public of those who, finding it impossible to be indifferent about the educational drift of India, believe that a concern for the health of educational criticism is immediately relevant to the political and economic urgencies of the time
- (4) To provide a mouthpiece for Indian educational thinkers and researchers
- (5) To strive for World Peace through Education

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# ETHICS OF THE COLLEGE PROFESSOR

BY

G. TURNER HICKS

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Through the ages professors in colleges have been regarded as being among the elite of civilization. A certain reverence has been given them, and justly so. They stimulated young minds, broadened intellectual horizons, suggested problems for advanced research, gave of their time and skill, and often kept themselves totally in the back-ground. To be the teacher of a brilliant student was in itself compensation.

With the advent of public education attitudes gradually changed. Everyone seemed to be going to college; the master's degree became common; the doctorate somewhat popular. More teachers were required in graduate divisions of universities. Younger professors who were not yet well established professionally were given places on graduate faculties. In order to hold their positions they, too, must be carrying on research, whether of major or minor importance. To inspire and direct research activities on the part of their major students was not enough. As a result the relationship between teacher and pupil became less clearly defined, and being a major professor lost some of its dignity. This spirit of working together is very wholesome and is to be commended in many ways. Yet, a certain fear of being surpassed by the more brilliant and thorough of his students has been evident on the part of some of these younger men. Not infrequently discussions arise regarding possession of the completed research study. Rarely does knowledge of such a circumstance reach the head of the department, and only with the boldest of graduate students would the matter be referred to the Dean. The student has spent his time and money, he must have a degree; the professor is always right.

The writer has had for his major professors men of personal honor and professional integrity. It is, thus, through no sense of personal injustice that he writes. Many of his colleagues and younger friends, however, have suffered grave injustices. As these came to his attention he became interested in the policies regarding the publication of the work of graduate students.

A very brief questionnaire was sent to the deans of state universities, Harvard, Johns Hopkins, Columbia, Northwestern, Leland Stanford, and others. Opinions were asked on the following questions

1 If the major professor suggested the problem for research and the student did the work, would you consider the professor privileged to publish the findings as his own?

a Would you consider footnote recognition of the student sufficient?

b Would you consider joint authorship the only ethical method of publication by the professor?

2 If the student suggests his own problem and does his own research should the major professor have any privilege of publishing the findings?

3 If the major professor gets a suggestion for a research problem from one graduate student and gives it to another, should the first student be given recognition? Should the professor?

4 If a professor published the finding of a student's investigation as his own before the thesis or dissertation was published, could the student still claim this work as his and present it in partial fulfillment for his degree?

5 Do you have any rules regarding these matters in your graduate school?

A nearly one hundred per cent return was received almost immediately. Although no college had rules regarding such matters every Dean expressed himself definitely. "A high sense of ethics, 'Truth,' A binding understanding that teachers do not receive credit for work done by students," and similar answers illustrate the spirit of these educational leaders. Even in the more subtle situation of a professor receiving an idea from one student, these men felt that the first student should be given some acknowledgment in the preface, or better still, the professor should make sure that the first student was not going to develop the idea before he turned it to another.

In answer to question 4, regarding the professor publishing a student's work, the almost unanimous reply was "I'd fire the professor." One Dean added, "Unthinkable," with exclamation points, others felt that not only should the professor be reprimanded or dismissed, but the student should be privileged to use the same material for his dissertation.



Some variance in opinion was expressed regarding the matter of joint ownership. The typical opinion is expressed in the following answer:

"We never take any credit from a graduate student, no matter what contribution we may have made to his problem. It is the student's problem, and although he may get some helpful guidance from the instructor, he is entitled to all of the credit that can possibly come to him for his work. The instructor is supposed to have earned his laurels earlier. This is the time the graduate student should have a chance to earn his."

In similar vein:

"Our feeling is that for the sake of the student he should be given all credit possible . . . . The professional hog who fattens his reputation by appropriating the work of his student is worthy of every condemnation."

In almost every instance joint authorship was frowned upon. To quote again:

"Usually such problems are settled between the professor and the student, and apparently settled amicably. Joint publication is rarely the result except in the department of science, where, I take it, the professor frequently has a very considerable hand in the research with the student."

One of the Deans wrote:

"Long experience indicates that it is better to go beyond what is just in acknowledgements to students and collaborators. A professor's confreres generally know whether he is riding on his students or whether they are riding on him."

It is in the field of science, probably, that most misunderstandings arise. A concrete example is that of a student who was working on his doctorate in one of our leading state universities. His major professor had suggested a problem in line with the type of research being done extensively in that department. The student spent a full year of painstaking work, adjusting temperatures, watching diets of the guinea pigs, and keeping the experimental conditions constant. As the experiment was nearing a close the professor asked for an outline of the work. Believing that it was wanted for constructive criticism, the student made a two or three-page abstract of procedure and findings up to date and left it with the professor. Later he submitted some of his graphs and diagrams, at the teacher's request. Using this as a basis the professor published a monograph that was well received

by the American Association of Scientists. Reviews of "his study" appeared in current periodicals. The student's name did not appear as co author, junior author, nor in the footnotes. My young friend went in search of another problem—he had the unpleasant task of completing his doctorate under this same professor.

One might consider this a very exceptional case if it were not for other evidence. A former student of the writer's went to another university to work on his doctorate. He had selected a problem in a new field, where little research had been done. A young professor who was assigned to him saw the possibilities of such a study and wished to be considered the pioneer in this field. He immediately started to work, gave little or no assistance to the graduate student, and later published a very similar study in which he pointed out the weaknesses of the study published by the student. It did not seem to occur to the teacher that weaknesses on the part of his student reflected his own. The student expected the professor to help refine his technique and strengthen his study—in fact, was paying tuition for that very reason.

In another case a student was writing a master's thesis on a problem of local history. His professor at the time was seeking a position in a larger sphere through his research. He not only slighted his class work to carry on investigations, but in this case refused to give any help to the graduate student because, "I plan at some future date to publish an article on that subject myself."

Although more concrete examples could be given, the writer does not care to imply that such conduct on the part of graduate professors is a prevailing practice. The replies in this investigation clearly indicate that such practice is frowned upon by deans throughout America, and that cases which do arise are in direct opposition to graduate school policies or codes of ethics. The returns seem to imply that if a student should state the facts unemotionally and truthfully his case would receive due consideration.

The fact that students do face such difficulties calls attention to the need for careful selection of teachers at the graduate level, and perhaps, presents an argument for further differentiation in the graduate faculty—some members who essentially are teachers of graduate students and directors of student research, others who essentially are research men, who are expected to produce studies that will add to the progress and dignity of the school. A university, to fulfill its obligation as an institution of higher learning, must place its major emphasis on search for truth. Whether this search is carried on by professors, graduate students,

or both, the existing realm of human knowledge must be extended. Until, however, men who are willing to forget self and seek the highest development of students are given the same recognition as men who spent the greatest part of their time in individual research, and until colleges are judged by the quality of work done by their students as well as by their faculty members, there is likely to be a growing conflict between graduate students and graduate professors.

—EDUCATION, BOSTON.

# SOME PRACTICAL SUGGESTIONS FOR EXTRA CURRICULAR ACTIVITIES IN SECONDARY SCHOOLS

BY

S ALI AKBAR, M A , (Cantab),

*Inspector of Schools, Hyderabad Deccan*

There was a time, and in India it was not long ago, when schools existed simply to prepare students for examinations or at best to give them knowledge. Happily, it is now being increasingly realised that what the school has to aim at is not merely intellectual training, but developing the personality, character and individual capacities of the child and training him in citizenship, so that when he grows up he may take his rightful place in society and contribute to its well being. For the realisation of this aim, curricular work alone, however complete and up to date, is not enough. Hence the importance which is attached now a days to extra curricular activities. It is interesting to observe that many activities, such as games, gardening and school excursions, which were formerly considered extra curricular, are now treated as curricular in progressive schools.

The advantages of extra curricular activities briefly speaking, are as follows —

- 1 Besides supplying the social ideals necessary for training in citizenship, they provide situations wherein such ideals can be practised and the right kind of habits formed
- 2 They develop leadership in the child by training him in the duties and responsibilities which will devolve on him later on as a member of society
- 3 They bring the teacher into closer contact with his pupils and enable him to discover and develop their special aptitudes
- 4 They bring school work into closer harmony with real life
- 5 They are a means of cultivating hobbies in the pupil and of teaching him the right use of leisure
- 6 They enhance the interest of the pupil in his school and strengthen his loyalty to it

On the social and moral side, there is still much work to be done in Indian schools. It must be admitted that in the past our efforts have been directed mainly towards preparing students for admission into the university. We have neglected the character-forming parts of education. Few schools in India can claim to have developed the right kind of discipline, a discipline that comes from within; fewer still to have cultivated the civic sense in the pupils. There is much talk to-day of educational re-organisation. The need for a reform of our educational system cannot be denied, but the problem of character building and training in citizenship cannot be solved by educational reconstruction. Its solution is to be found in the development of extra-curricular activities in our schools. In the class-room it is difficult for the teacher to establish personal touch with individual pupils. On the other hand, corporate activities outside the actual lessons provide opportunities for him to mix freely with his pupils and to gain their confidence in a way which is not possible in ordinary school work. The value of such activities is especially great in a country like India where residential schools are an exception rather than the rule and where the home influences, in the majority of cases, are not of the right kind.

The range of extra-curricular activities is very wide. They include games, athletics, debating and literary societies, school magazines, book clubs and reading circles, music and dramatic societies, school excursions and journeys, cooperative societies, gardening and scouting. It is not possible for any school to organise all these activities, nor is it desirable to attempt an extensive and ambitious extra-curricular programme. Activities like games, scouting, debating societies and excursions should be undertaken by every secondary school. Apart from these, the extra-curricular activities adopted should depend on the local conditions, the type of children in the school and their common interests. It is better to run a few out-of-school activities successfully than to practise a large number in a haphazard manner. Extra-curricular activities should never be forced, but they should arise from the needs and interests of the boys and the opportunities which the school offers.

If extra-curricular activities are to give training in leadership and responsibility, it is necessary that, as far as possible, the boys themselves should be allowed to manage them. But no extra-curricular activity can be started unless there is a teacher to sponsor and guide it. Every teacher should be expected to help in such extra-curricular activities as games, school excursions

and school debating societies. In making new appointments on the staff of a school, it is not enough to know what the academic qualifications of the various candidates are. We should also inquire what kinds of extra curricular activities they can handle. No application should be entertained unless it is accompanied by the testimonial of the head of the school or college where the candidate has received his education. There is no doubt that such testimonials are generally of little help to the Inspector or who ever has the authority of making appointments, but it is sometimes useful to look in the testimonial for what it leaves out.

Another condition necessary for the success of out of school activities is the co operation of parents. Every effort should be made to enlist the sympathy and interest of the parent in the extra curricular programme, because, in the first place, this programme encroaches on the free time of the pupil, and secondly because he is frequently called upon to contribute towards the expenses entailed by it.

I will now deal with some of the more important extra curricular activities which are in vogue in Indian schools.

*Outdoor Games* Attempts made in recent years to popularise Indian games in our schools have not met with much success except in Primary schools, where such games have been found useful owing to their cheapness. The fact that football, hockey and cricket have taken a firm root in the Indian soil should not hurt our national pride, as these games, at any rate football and hockey, are played all over the world. American games are also gradually finding their way into Indian schools. The chief advantage of American games is that they require comparatively small space.

Games have a beneficial effect not only on the physical and mental development of the child, but also on his moral development. It is through game rather than direct instruction that we should try to cultivate in the boys self control, self discipline and a sense of justice and fair play. It is therefore not sufficient to make provision for games: it is necessary to ensure that the boys play them in the right spirit. The revelation of the causes of the failure of the Indian cricket team which toured in England this year has brought home to us the vital need for developing the team spirit in our students. Every teacher who is young enough to play should take part in games with the boys, for the playground offers to him a better opportunity of moulding their character than the class room. Apart from this, participation in game is to his advantage. There was a saying among the ancient Greeks: "A man will remain young just so long as he plays."

You will feel all the more young if those with whom you play are school boys.

There is a tendency in some schools to concentrate on the members of the school team and to neglect the physical education of the rest of the school. In addition to the provision usually made for drill, arrangement should be made for all the boys to play some game or other at least twice a week. Adequate playing fields should be provided to secure this end. In big towns if it is not possible for each school to have a playground of its own, an attempt might be made to provide playgrounds common to schools of selected areas. It is not enough to have inter-school tournaments; every school should organise inter-class tournaments to give as many boys as possible a chance to play in matches.

*Boy Scouting.* The great value of Scouting lies in the opportunities which it offers for character formation and training in citizenship. From the point of view of an educationist, the most striking feature of Scouting is that it embraces all the up-to-date principles of education—all-round development of the child through self-education, self-expression, self-activity and self-discipline. "Learn by doing" is the main principle followed. In the class room the teacher has to deal with a group, but the Scout Master studies individual boys, tries to remove their defects and promote the needed qualities in them and gives them a healthy environment and healthy activities for mind and body. The programme of Scouting is so devised as to teach the scout to subordinate his selfish interests to the common good and to awaken in him the desire and the ambition to be of service to others. Scouting also encourages hobbies among the boys and thus teaches them how to use their leisure hours usefully and happily. But in India perhaps the greatest value of scouting is that it paves the way effectively for communal harmony, which our country sadly lacks. The uniform, the Scout ideals founded on the Scout oath and the Scout Law, the patrol system, hiking, camping and other scout activities—all these help to unite the boys into one common brotherhood and to make them forget differences of religion, caste or creed.

The objections sometimes raised against Scouting would, I think, disappear if its programme were adjusted more closely to our national needs, as has been done in some parts of India. No Scout troop can thrive unless it has the full support of the Head-Master of the school concerned. It is necessary to exercise the greatest possible care in the selection of the Scout Master, on whose personality, character and enthusiasm the success of the scout troop largely depends.

The chief obstacle in the way of the spread of Scouting in India is the poverty of the vast majority of the pupils. Thousands of boys anxious to become scouts cannot realise their ambition because they cannot afford to provide themselves with the uniform. No effort should therefore be spared to make the aims and objects of Scouting widely known to the public, so that it may come forward to help what is really a national cause.

*Debating Societies* Apart from its value in developing self-expression and the power of speech, debating offers opportunities for character training, inasmuch as it cultivates the team spirit, inculcates fairness to colleagues and develops desirable attitudes towards opponents, judges and the audience. It is also a powerful incentive to extra reading. A debate should be so organised that every pupil gets an opportunity of taking part in it. It is better to have class debating societies than to have one debating society for the whole school. The subject should be announced beforehand with a list of books which might be consulted and all pupils should be asked to come prepared. The topics should be chosen with due regard to the interests of the pupils, they should never be abstruse or abstract, but, as far as possible, should be closely related to the life and experience of the pupils. Debates in the mother-tongue might be arranged in the middle school section and both in the mother-tongue and English in the High-school stage. In a Mission school which I inspected a short time ago, a weekly Topical Class has been started as an adjunct to the school debating society. This class has been found very useful in interesting the boys in current topics and giving them information about them. Last term the teachers discussed with the boys the following subjects, among others—Fascism, Communism and Democracy, Civil War in Spain, Research in Malaria and Leprosy, George V, Patriotism, History of a Letter (Post Services etc.), Locomotives and Motors, Italy and Abyssinia, Money and Barter, London, The Great War and after, Should India import foreign goods.

*School Excursions* School excursions give the children new experiences, add to their knowledge of the environment, develop their power of observation, bring the teachers into closer touch with their pupils and, above all, help to harmonise school instruction with real life. In the big towns of England it is a common sight to see crowds of pupils marching through the streets with their teachers to museums, botanical gardens, zoological gardens, factories and buildings of historic interest, while in Germany so great is the importance attached to school excursions that they have been made compulsory once a month.



A programme of the excursions to be undertaken during each term should be drawn up in advance. The places selected should be such as would enrich the boys' experience and give them objective knowledge of things about which they read in their books. In a town the programme would include such places as the Market, the Town Hall, Post Office, Water Works, local industries, public gardens, Railway Station, Telegraph Office and Telephone Exchange, besides buildings of historic interest, if any. As many of these places would be within walking distance from the school, excursions would not usually mean any financial burden either to the school or to the pupils. The success of an excursion depends on the thoroughness with which the preliminary preparation is made and the way in which it is conducted by the teachers after the party has reached its destination. The pupils should be required to do a little reading beforehand. A few questions should be given to them and they should be told that they must seek the answers at the place visited. During the excursion the boys should be encouraged to ask questions. The teacher appointed to conduct the excursion should acquire a thorough knowledge of the place by visiting it beforehand. Each boy should be armed with a note-book and a pencil so that he may be able to note down what he observes. After each excursion there should be a discussion on it followed by the writing of an essay.

School journeys are quite common in Europe. The German schools have established the class exchange system, whereby a whole class under the charge of a teacher goes to a school in another place for about a fortnight and a whole class from the latter school is received in exchange. The members of the visiting class attend lessons in the school where they are guests, but they spend most of their time in excursions and sight seeing. Mention may also be made of a Bureau which has been established in Berlin in recent years with the object of promoting friendship between the German and foreign pupils by arranging for the exchange of individual pupils and sometimes of a whole class. A similar Bureau might be formed in India to arrange for the exchange of pupils belonging to different parts of the country.

With a view to giving an impetus to extra-curricular activities in the schools at Hyderabad, the Hyderabad Teachers' Association appointed a Committee in 1935 to prepare a report on the subject. The report produced by the Committee contained many valuable suggestions. One of them was that a bureau should be established in connection with the Association to act as a clearing house for ideas and an advisory board for schools regarding extra-

curricular activities. It is now nearly a year since the proposed Bureau was set up. During this period it has done useful work in collecting information, tabulating experiments in extra curricular activities and co-ordinating the work done in the various schools.

## TO BE THE BEST POSSIBLE TEACHER REQUIRES

*Physical Vitality.*—I will try to keep my body well and strong.

*Mental Vigor.*—I will study daily to keep my mind active and alert.

*Moral Discrimination.*—I will seek to know the right and to live in it.

*Wholesome Personality.*—I will cultivate in myself goodwill, friendliness, poise, upright bearing and careful speech.

*Helpfulness.*—I will learn the art of helping others by doing helping things daily in school and home.

*Knowledge.*—I will fill my mind with worthy thoughts by observing the beautiful world around me, by reading the best books, and by association with the best companions.

*Leadership.*—I will make my influence count on the side of right, avoiding habits that weaken and destroy.

These things will I do now that when my time comes I may be worthy the high office of teacher.

Every age has had its own art, the art which best expressed its aspirations, The art of the next century or so may be the art of teaching. Why not? To mould human beings into their finest possibilities involves the same epic struggle to create beauty and harmony out of stubborn material limitations which is the foundation of all great art.  
Dorothy Canfield Fisher.

(In the Journal of The National Education Association U.S.A.)

# THE CINEMA AND INTERNATIONAL LIFE

BY

SHEIKH IFTAKHAR RASOOL

The cinema both as an art and an industry has now reached an importance and a perfection which everyone recognises. It has indeed become an integral part of modern life.

Economics as a science and philosophy must in view of their great social importance penetrate deeply into an art like cinematography, the purpose of which is both to amuse and educate the public.

The art and industrial sides of cinematography ought, it is clear, to develop along parallel lines without interfering with or damaging each other. This ideal state of things is not always realised, and then we find industry exercising a maleficent influence on the artistic level of the productions in order to meet the requirements of the commercial situation.

The description of the cinema as 'industrial art' does not define the proper relationship between its two contrasting elements.

If we consider the cinema on its economic side, the borderline between art and industry is clearly defined, and industry rather than being an element of possible danger of art is really its natural source of life and growth. The economic value of the cinema, however, on the industrial side, lies in production and management and their various aspects and developments. On the art side, it lies in the handling and solving of those questions of an economic nature that arise in the production of films.

The crisis which has hit the commerce and industry of all nations so severely has been less felt in the cinema world than in other sections of industry. I do not mean by this to assert that the cinema still enjoys the flourishing conditions of pre-crisis times. Many picture theatres have indeed been obliged to close their doors, and the crisis has made itself felt at all box offices. This very fact has slowed down the rhythm of production, and there are a number of firms today which have suffered seriously. At the same time, the cinema still holds the second place among the national industries of many nations, and still shows a high figure for profits in comparison with the deflation and losses undergone in other industries.

In this connection let us now examine two things:—

1. How can the cinema demonstrate the international repercussions of industrial, social, economic and political happenings that seem, often quite wrongly, of barely national interest?
2. How can the cinema spread a knowledge of movements, plans, schemes and experience of world wide interest; in other words, express the principal aspects of international life?

It may even be said that the reality of international life will not be clearly attested until the questions set out above are concretely treated in a single socio-economic film. In this domain, as in the political, it may be that some events and policies interest only small national groups; but their intrinsic importance and their augury of good or evil call for consideration from the international standpoint. The stone that falls into the water need not strike the centre of the pond, but it will set up ripples that spread over the whole surface.

If we want to stop the ripples, we must prevent the stone from falling into the water and to do this we must consolidate the ground.

It will be well to consider a few concrete cases from the angle of their cinematographic and educational possibilities, especially for adults. They do not more than offer suggestions of what could be or could have been done, general adumbrations rather than definite proposals.

### **Law of Supply and Demand.**

It is plain that the international collaboration that has been evolving for the last few years is not yet understood by the mass of the people, and the consequences even of a general law like that of supply and demand are not clearly perceived in their social and international aspects. For instance that 'labour should not be regarded merely as a commodity or article of commerce' is closely bound up with the law of supply and demand. This law should receive concrete treatment by the cinema, but with no departure from the truth: it seems both possible and desirable to demonstrate its reality without any exaggeration, and not only from the purely economic standpoint but also as it relates to labour, itself a factor in production costs. It will be immediately apparent that such a subject, impinging as it does on the problem of production, would raise the question

of wage, and finally compel a popular exposition of the principles of political economy, principles that in many respects regulate the growth of international life. It would also be only natural to show what becomes of the law of supply and demand in economic systems other than the capitalist, and how in every economic system there is an endeavour to mitigate its harmful influence on human personality.

The law of supply and demand has a close bearing on certain modern forms of competition arising in national and international trade and it is common knowledge that competition often reacts adversely on living and working conditions. Certainly some emphasis should be laid on the stimulus and fruitfulness of economic and industrial freedom, its creative achievements, its international aspects (the consequences of great inventions and discoveries), but there is another side of the picture—the destructive social effects of competition that have become more marked since the industrial revolution.

From competition to interdependence is only a step, but a step to another vast domain for the educational cinema. All modern international life is shaped by the gradual, too gradual, realisation of the truth of the law of interdependence, which when interpreted in a spirit of comprehension and mutual aid is the law of common interest and human unity.

On a general theme of this kind, and by broadening out the conclusions, and in some respects by rationalising it, it will be possible to compose a film eminently and profoundly international.

### Cinema in Education

Everyone knows the part played by the cinema in the leisure of all classes of society. The educational film, covering as it does a tremendous field of non-fictional subject matter, claims the attention of all to whom the cinema is not merely a pastime, as well as the thinking men and women who recognise the immense influence of pictorial entertainment on the children of today, the adult audience of tomorrow.

Apart from the fully recognised scholastic value of the educational film, its additional value is training the 'movie mind'. While the children are absorbing knowledge, learning about nature, about industries, about foreign countries they are acquiring, at the same time, an appreciation of the terms of the cinema as opposed to the terms of the theatre. If the filmgoers of the future revolt against the photographed stage plays as I

sincerely hope they will—refuse to accept a static drama eked out by slabs of pageantry as the art of the cinema their discrimination will be founded on their early experience of the educational film.

Not only this, but the educational talking picture now brings all the world into the class-room. Mechanical progress has provided the school with a powerful new instrument for overcoming the obstacles of time and space. The modern student can explore the seas, skies and earth; penetrate ocean depths, or forests and Jungles: visit far-off lands to become acquainted with other customs; scrutinise the animal and plant kingdoms, the inner workings of the human mechanism or observe the world's social economic progress.

With this instrument education becomes a vital pursuit, full of enriching experience. The teacher becomes a guide to the student whose mind and spirit have been stimulated, and whose latent curiosity has been aroused.

Visual education is not new. The class-room has long employed still pictures, graphs, maps, and the projection of this material by means of the glass or film slide, and the opaque projector. But the introduction of sound and motion to pictures has brought teachers two steps nearer to the reproduction of reality, making this a vitally interesting medium for instruction.

Our rapidly changing social order has greatly complicated the educational process. The learner must co-ordinate a bewildering number of facts, explore almost unbounded realms. The teacher needs the aid of science in this age which science has done so much to make complex.

Besides, the greatest uses to which the film can be put is to improve the protection of maternity which our country needs very urgently. This cinematograph education might be directed towards a two-fold end:—

1. Showing the injuries which certain shorts of work entail upon the health of mother and infant.

2. Making known the social machinery created for the welfare of the working mother and her child.

Among the first of these risks may be mentioned bodily injuries that sometime develop slowly through the occupational life of the adolescent, just at the age when long spells in abnormal positions, as are required in certain work, or the constant carrying of heavy loads, most easily injure growing organs. The cinema can easily bring these dangers to notice by showing the occupations in which they arise.

The cinema may also employ its varied resources to disseminate, in the same way, the principle of protection of working girls. It can explain the dangers of premature employment, it can show in some cases the moral harm that may be done to children of tender age by various classes of work in industry, in the fields, in shops, in offices and in itinerant occupations, etc.

No matter in which direction it is used, the cinema is a great potent instrument in our national life, especially in schools and colleges, for both children and adults.



## REVIEWS

### Chemistry in Medicine.

A Cooperative Treatise Intended To give Examples of Progress Made In Medicine With The Aid of Chemistry. Edited by Julius Stieglitz. Publishers: The Chemical Foundation Inc. 85 Beaver Street, New York N.Y.

Here is a book which has had its beginnings as its author confess 'when a bright little life was lost.' The authors have put their labours together in consistent essays on the cooperation of Chemistry and Medicine. Doubtless, Chemistry is not only a handmaid but the very life-blood of the science of healing and no work would be more commendable than the expiation of this aspect to the experts and lay-men alike. In the chapters that follow the story is told of 'the most important successes already assured, in the combating of disease and alleviation of suffering through this alliance of sciences'. The authors which include researches and professors of repute have outlined the role of chemistry in the realm of medicine with genuine experience and vivid representation. The Chapters on 'Policing in the Laboratory,' 'Alleviation of suffering' through general and local anæsthesia, and the 'War on Germs,' are eloquent testimony to the creditable efforts of the authors. This excellent volume has pronounced merits of matter and get-up and we are sure will be an asset to the knowledge of any reader who takes to it.

### Roadsense for Children.

By Major C. V. Godfrey. Publishers: The Oxford University Press. Price 2s. 6d. net.

It is one of the most welcome books to school libraries, and the suggestions and methods detailed herein are such as are sure to benefit the juvenile world. Everyday we hear of innocent children in game and frolic coming under the wheels even of a most conscientious driver. The 'Safety First' movement is the most humane movement in the world and the Roadsense for Children with its prepossessing illustrations should be the Bible of all interested in children-pedestrians especially. Can it be denied that Pedestrianism is an art? And to be a successful pedestrian the book is an unfailing guide. Major Godfrey as the guardin-angel of the traffic Control at Salford has realised

the problem of road traffic in all its varied and practical aspects and has detailed lines of action calculated to save the lives of millions of human beings. Like all good Oxford Books the printing and get up of the volume is intended to defy rough usage and is a valuable contribution to Safety First Literature.

### **The Conduct of Life, by Ralph Waldo Emerson.**

Edited by Sherman F. Mitchell, National Home Library Edition Publishers. National Home Library Foundations, Washington D.C. Price 24 cents.

As an essayist Emerson has his secure niche in the temple of literary fame and as a literary philosopher he stands second to none. It is to him that the growing adolescents are directed for cultured thought. The present volume comprises essays on subjects which have a direct bearing in the make up of a useful and cultural life. The deep philosophy which like a mellow twilight radiates round his pregnant observations never fails to make a place in the heart of the reader. No economist ever said 'Wealth has its source in application of the mind to nature, from the rudest strokes of spade and axe up to the last secrets of art.' In the hands of Emerson thought is electrified and the general reader stands in simple surprise before the mastermind. How frank yet sober, how mature and yet unostentatious are his musings, for he has a conviction of the mastery of self: "I dip my pen in the blackest ink because I am not afraid of falling into my inkpot." No sermon is more useful these days than Emerson's in the discussion on Fate. 'Tis the best use of Fate to teach a fatal courage. Go face the fire at sea, or the Cholera in your friend's house, or the burglar in your town or what danger lies in the way of duty. Knowing you are guarded by the Cherubim of Destiny. If you believe in Fate to your harm, believe it, at least for your good." We congratulate the National Home Library Foundation the non-profit organisation to make the master minds available to the general public in such a cheap edition.

### **The Oxford Geographical Note Books for Secondary Schools**

Nos VIII and IX By Jasper H. Stenbridge, Oxford University Press. Price 1s 3d and 1s respectively.

Those who have used the Primary series of Mr. Jaspers Geographical Note Books will welcome the complete secondary series 'World' and the 'British Empire'. The author has

selected maps and exercises eminently suited for home work and for examiners in Geography and admirably succeeds specially in the apt choice of his material. The two note-books have done ample justice to the subject matter and have demonstrated the importance of different regions. They are cordially recommended for sound workmanship and clear type. The student, we are sure, will profit a good deal in his examination as well as class work. The printing and get-up leave nothing to be desired.

**School Certificate Exercises in English.** By Frederick T. Wood Macmillan & Co. Limited 2s. 6d.

The present volume is based on the experience of Mr. Wood's teaching in Sheffield—who has primarily intended it for forms taking the School Certificate Examination of the Northern Joint Board. The volume has too big Sections of Prose and of Poetry and some others on punctuation, figures of speech, and essay writing. Both the sections of Prose and Poetry contain excerpts from eminent writers of English, some of whom are classic by now. They are followed by a series of questions which are sometimes acutely searching and tend to initiate the pupil to the beauty of style and the original inspiration of the passage. The book we hope will make a ready headway with students and teachers alike as it is a compendium of passages and questions which are needed every day in the class room.

**A New Latin Course Part I.** By H. E. Gould & J. L. Whieley. Macmillan & Co. Limited. 2s. 6d.

Among the many books on Latin Courses for School Certificate Examination this one stands out as one of the most practically useful. The authors in the introduction deal with the generalities which the Latin language involves, and easily shade off to the technicalities, in a manner which is interesting and usefully instructive to the student. Excellence in translating from English to a foreign language can only be gained by a rigid application of the student on English to Latin translation and *vice-versa*. The exercises are graded and stories have been introduced to break the monotony of druggery. The list of Latin English vocabulary makes the volume desirable and handy.

**Our New Villages.** By E. V. S. Maniam. Published by Patt & Co. Agra.

It is a small 50 pages booklet dealing with the province of Agra: its Geography, its industries and commercial movements

and the prospects of the new scheme of Rural development. The writer has collected statistics and has spent labour over a consistent analysis of the possibilities of development. The authors desire to understand the province has been genuine and he has offered suggestions which are worthy of attention. We hope the misprints which disfigure the pages of the volume will be corrected in the second edition.

## EDITORIAL NOTES.

### The University of Allahabad.

We congratulate the University of Allahabad on having completed 50 years of useful and efficient service. It is celebrating its golden Jubilee in the month of November and an appeal has been made by its distinguished alumni for funds to meet its pressing wants. The appeal has been endorsed by His Excellency the Chancellor of the University and a Committee has been appointed to make arrangements for bringing the celebrations to a successful conclusion. The University of Allahabad has been moving with the time and deserves well of the public and the Government. It had vast jurisdictions when it was started and used to cater to the educational needs of the Central Provinces and Berar, Rajputana and Central India, in addition to those of the United Provinces of Agra and Oudh. With the establishment of the University of Nagpur the Central Provinces and Berar went out of its fold and when the Sadler Commission brought out its report it was deprived of its jurisdiction over the Matriculation and Intermediate Examinations. A further curtailment of its activities took place when its so called external side was conglomerated into what is now called the University of Agra having control over the higher education of Rajputana and Central India. But through all these vicissitudes the University of Allahabad has always maintained the reputation of being the premier university of the Province of Agra and Oudh. Its professors have been noted for their research and scholarship while its students have won laurels in academic spheres as well as in public services. The proceedings of the meetings of its Court and the Executive have been marked by sobriety, shrewdness and a sense of fair-play and are largely responsible for its well earned reputation. Of late its finances have met reverses and the Government of the Province could not or would not help it. Being the chief centre of light and learning in the province it behoves both the Government and the public of U.P., to come to its rescue and to see that it does not suffer in efficiency for want of funds. There has often been a lamentable lack of realisation of the scope for greater service which this University is capable of rendering for the advancement of provincial prosperity and it is hoped that the impetus given by the Jubilee celebrations will help it to tide over the obstacles to progress and improvement.

## Wanted a Commission for Secondary Education

The Rt Hon V S Srinivasa Sastri while presiding over the celebration of the Founder's Day of the P S High School, Mylapore, put in a strong plea Commission and general enquiry into the condition of secondary schools. Mr Sastri who is a happy blend of the politician and the educationist cannot be accused of a partiality for commissions and his demand for a commission of enquiry would be supported by the thousands of teachers serving in secondary institutions all over the country. We have had commissions and enquiries of all kinds for University education and primary education by whom the secondary education has been considered either as a handmaid to the one or as an obstacle to the expansion of the other. It has never had the chance of being considered independently of these two. The greatest stigma on the system of the administration of secondary education in India is the deplorable condition of service of teachers working in Non Government institutions. The cries and the wails of these teachers voiced through their conferences has fallen on deaf ears and while the theorists are busy enunciating newer and novel schemes of reconstruction of secondary education, the agents on whom depends the success of these schemes are groaning and smarting under a sense of injustice and bitterness. The improvement in the service conditions of the teaching profession in non government secondary institutions is overdue. But no government in any province has had the courage or the vision to face the problem boldly and fearlessly. The vested interests against the teachers are too powerful to be made to realise the enormity of the wrongs perpetrated by them on an innocent and docile body of public servants. Nothing short of a Commission of Enquiry will arouse the conscience of the public and the Government to the gravity of the situation. Mr Sastri had been a schoolmaster before he took to politics and he spoke with authority inspired by a sense of justice and fairplay when he urged for the appointment of a commission to put secondary education on a sound and sufficient basis.

## The Primary Teachers in India

The service conditions of primary teachers in India are even worse than those of secondary teachers. Ill equipped, underfed and discontented hands man the teaching profession in our primary schools and nothing short of a revolution is alleged to be a remedy for their ill. The local authorities under whom they

serve are not competent to understand their grievances and are content to look down upon them engrossed in their own personal aggrandisement and grossly selfish standpoint. They are neither organised nor have they any representative philanthropic politicians to take up their cause and fight for them. They are the dumb driven cattle of Indian society suffered to eke out their livelihood in a mean and contemptible manner. They suffer most in rural areas and cannot raise their voice. Under the dual control to which they are subjected, which means under the control and at the mercy of every member of the local and district board and every government official, high or low they are mute victims. They look with suspicion upon the efforts of the other types of teachers Associations who approach them to ameliorate their conditions and do not take any steps to produce leaders among themselves. Their condition is desperate owing to their numbers and no local authority dare take up their problem in a sympathetic spirit as it involves expenditure on a gigantic scale to put primary education on a sound footing. What is required is vision and imagination on the part of the Government and the local authorities to chalk out a bolder financial policy for primary education. Investment in primary education does not give immediate returns but is a rational asset. We should even suggest the floating of loans or special taxation to improve primary schools for boys and girls. Any government that leaves primary teachers alone will soon rue the day when it adopted this suicidal policy. The present primary teacher is a convenient political tool and as such will be of the greatest danger to the political party that exploits him. The improvement in the condition of the primary teachers of a province will spell the progress and prosperity of that province.

### **Pandit Ram Narayan Misra.**

Pandit Ram Narain Misra. Headmaster, Central Hindu High School, Benares, is retiring from this month at the age of sixty. He joined the Education Department of the Province as a Sub Deputy Inspector of Schools and soon rose to be the Deputy Inspector. In the inspection line he succeeded in inspiring the teachers of rural areas to take their work in a missionary spirit and developing among them a spirit of self-respect and professional enthusiasm. Numerous chairmen of District Board and district offices bore testimony to the extraordinary qualities of educational leadership displayed by this quiet and unostentatious Government official. And in addition to this he became a

power in the city in which he lived. There was no literary, religious, philanthropic educational and social movement in the city in which his help was sought in vain. He moved silently but confidently among public workers, business magnates, wealthy bankers and Zamindars and made them open their purse strings for all good causes. But although in the inspecting line his heart yearned for schoolmastering which came natural to him. And when the authorities of the Hariish Chandra High School wanted him to build up that institution he persuaded the Government to lend his services to them. As the Headmaster of a High School he shone with greater lustre and the thousands of pupils whose character he changed for the better looked upon him as a sage. When the Government insisted that he should come back to Government service he went back as a Headmaster of High School and wherever he was posted he put new life into the institution and the citizens among whom he dwelt. Pt Madan Mohan Malviya, who had known him for a long time soon requisitioned his services to put the affairs of the Central Hindu School in order. His accession to the gaddi of the Headmaster of that institution was hailed with delight and he amply justified the choice. After his retirement from Government Service he was enlisted in the service of the Central Hindu School from which he is retiring now. Educationists all over India know Pt Ram Narayan Misra as the organiser of the All Asia Educational Conference, the biggest educational gathering in the country. Those who came from outside marvelled at the tremendous influence wielded by this simple, pious and learned man. The Indian Journal of Education is his late debtor as he came to its rescue at Gwalior and canvassed donation and support for its successful running. An ideal schoolmaster, Pandit Ram Narayan Misra is enshrined in the hearts of so many of his fellow beings whom he has helped to live better. We are sure we have not heard the last of him and the works of public utility will certainly claim his attention till the end of his days.



**The late Babu Gauri Shanker Prasad.**

We regret to announce the death of Babu Gauri Shanker Prasad of Benares, a great Arya Samajist, a sincere public worker, an ardent social reformer, an earnest lover of education and a philanthropist above all. He conducted and managed a number of educational institutions which he loved with a characteristic passion. He quietly donated a lac of rupees to the Arya Vidya Sabha and proved how even a man of ordinary means can give gloriously and without any noise money earned by the sweat of his face. Babu Gauri Shankar Prasad was a delegate of the All India Federation to the World Education Conference at Geneva and the New Education Conference in Denmark. The purity of his public life, the simplicity of his living and the sturdy self-respect and self-control displayed by him in public affairs will serve as a beacon light to all sincere patriots of the country. May his soul rest in peace!

# INTER-RELATION BETWEEN THE VARIOUS PARTS OF GEOGRAPHY

*(Continued from to the previous issue)*

(Physical Geography, General Geography,  
Applied Geography and Map-Drawing)

—

## A RESEARCH PAPER

BY

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## APPENDIX

Tests in the original form

## INTER-RELATION BETWEEN THE VARIOUS PARTS OF GEOGRAPHY

*(Continued from the previous issue).*

(Physical Geography, General Geography, Applied Geography  
and Map-Drawing.)

### III. Marking of the Test.

In general in each item, except for map-drawing, the answer was to be indicated either by checking with a cross or by writing a word or name on the dotted line against the question. Each correct answer was credited with one mark. A few difficulties arose in one or two questions, and these are briefly referred to below:

Question 1c. Name one of the chief occupations of people  
in The Black Country. . . . .

The chief occupations of the people in this Area are Steel Manufacturing, Coal and Iron Mining; and any of these has been regarded as correct.

Question 2. Name the Sea, river or mountain which  
separates—(a) Scotland from England.

The answer could be Cheviots, The Tweed or Solway Firth and any one of them has been taken as correct.

Similarly in question 3b, requiring to name the country which is to be regarded as the chief source of *rubber* both Malay Peninsula and Brazil were considered correct. In question 4c, to name the country which governs "Iceland," Denmark as well as Iceland or Independent were treated as correct. In Question 11, to name the Ports of Great Britain and Ireland which exports chiefly "Cotton Goods," both Liverpool and Manchester were accepted and so were Belfast and Londonderry for Linen Goods.

The marking of Map-drawing was a different problem, and attempts were made to make it as much objective as possible. Definite rules in minute details were made before the answer books were actually marked and to make the marking more consistent the maps were marked in collaboration with Mr. Meldrum, a student of Diploma in Education with geography as special subject.

Before attempting to discuss the statistical results, it would be interesting to examine a few of the answers.

In question 16 Window in Calcutta face towards the south because —

- (a) The Ganges flows towards the south
- (b) The winds come from the South
- (c) People have a superstition about houses facing south
- (d) The sun shines from the South

The question has been correctly answered by only seventeen pupils (13.2 per cent). Most of the answers have given (d) to be the best reason, and the reason for that is that in Scotland the sun shines from the South and is always welcome and the pupils naturally thought the same to be true of all places. They did not apply their knowledge of winds and temperature in the country about which the question was asked, and argued only from their own experience. A few gave the answer (c) probably having heard from somebody or having read somewhere about the superstitious nature of Indians.

In question 44 The temperature never rises very high at Quito because —

- (a) It is situated near the Equator
- (b) It is situated at a high Level
- (c) It has a heavy rainfall
- (d) A cold current flows along the nearer coast

About 50 per cent students did it correct, but a few of the wrong answers indicated (a) to be the best reason, either not knowing what Equator is or simply seeing it to be the first reason, thus showing their gross lack of geographical knowledge and reasoning ability.

A few of the interesting answers received were —

The Japanese live in houses made of wood because 'Bricks are scarce'

England has not had so many continental wars as France or Austria because 'It had no desire to expand its territories'

Cotton is woven in Manchester because 'It has Cotton Mills'

People from North Europe go to the Riviera in Winter because 'They have long Christmas Holidays'

There are Chimneys on the roofs of houses in Scotland because "They let in the air."

The ancient Greeks had a strong Navy while India had none because "India had no enemies."

Norway is warmer than Sweden in winter because "It is further North."

Another set of interesting answers were found in maps. A close examination of the maps, as also of the nature of answers supplied a great deal of knowledge regarding the habits—thoroughness, cleanliness, orderliness, and modes of thinking of individual pupils.

#### IV. Results and their Interpretation.

##### A. A study of the distribution of correct answers.

A study of the distribution of correct answers in the three sections—General, Physical and Applied in the four classes shows that:—

##### (a) *General Geography.*

The questions are spaced all over, though not in a normal distribution. 3A, and 3A<sub>2</sub>, give a more abnormal distribution than 3A<sub>3</sub>, and 3B. 27, 30, 23, and 19 items out of a total of thirty-seven have been answered correctly by at least *twenty students* (roughly 2/3rds of the total number of the students in each class) in classes 3A, 3A<sub>2</sub>, 3A<sub>3</sub>, and 3B respectively showing that the Question Paper tended to be rather easy. 3A<sub>2</sub> seems to have done the best.

##### (b) *Physical Geography.*

The distribution appears better spaced than that in the General, though there is an opposite tendency; 11, 13, 16 items (out of 27) have not been answered by more than nine students in the classes 3A, 3A<sub>2</sub>, 3A<sub>3</sub>, and 3B. The best distribution is in class 3A<sub>3</sub>, and the worst in 3B.

##### (c) *Applied Geography.*

The worst distributed among the three and the tendency is similar to that in the General. 15, 15, 18, 16 Items (out of 21) have been answered correctly by more than twenty students. It seems to have been done pretty equally by the four classes.

Distribution in the whole population (129) shows that General and Physical Geography are well spaced, with opposite tendency towards the end, the applied Geography is not well distributed and leans towards the side of the general, and the result is apparent in the distribution of the total ( $37 + 27 + 21 = 85$  items) which is pretty nearly equally spaced, but leans a little to the bottom side indicating the paper to be rather easy and this should be expected as the three classes of the Boroughmuir High school are the best among the III Year classes in that school and the 3B of the Royal High school is the medium class there

In the map drawing section Question 1 was not answered by 45 pupils and question 2 by 49 pupils. On the whole it may be said that the paper was suitable for the Class it was meant for

### B Distribution of the Score.

The following table gives the distribution of score in the four sections separately and in the Total.

Possible Score	Mean	Median	25 per centile	75 per centile	Semi Inter Quartile	$\sigma$
107 Total	59.52	60.768	54.031	66.541	12.51	10.64
37 Gen	25.57	26.45	22.182	29.806	3.812	1.672
27 Phy	10.57	10.473	8.729	12.485	1.873	2.894
21 App	15.17	15.151	13.466	17.153	1.644	2.550
22 Map	8.42	8.158	5.325	11.08	2.878	3.783

The mean and the median in all the scores agree well, the greatest discrepancy is in the marks in general geography, where too, it does not exceed by more than a mark or 3.4 per cent. The interquartile distribution shows that the scores are clustered in the middle leaving a large margin for the headroom and the footroom, and the extent how they are distributed is evident from the  $\sigma$ , the highest in the total (the total score being high), next in general geography and the least in the Applied geography. The score in the map drawing are the best scattered, out of a total of twenty two the mean score is 8.42 and the  $\sigma$  3.783

### C Correlations between Test Marks & Class Marks

Test marks when correlated with the Geography marks obtained in the class examinations in the 1st term, and also with

the grand total in the same exam. yield the following results:—

Class Marks in Geog. and Test Marks.	Class Total Marks and Test Marks.	Class Marks and Class Total.	
3A '408±'097	'432±'094	'556±'080	} Boroughmuir.
3A <sub>3</sub> '697±'061	'497±'044	'852±'032	
3A <sub>2</sub> '413±'094	'474±'093	'636±'071	
3B '217±'118	'152±'121	'531±'089	Royal High School.

All the correlations with the exception of the two (Test marks with Class Marks and Test Marks with Class Total in Royal High School) are substantial, and these in 3A<sub>3</sub> may be said to be high.

The correlation between the class marks and the Class position (total class marks) is the highest in 3A<sub>3</sub>, and the test marks also correlate the highest with class marks in geography and with class position in the same class. The correlations in various classes cannot be compared with each other as the class examinations were held by different teachers. But the low correlations in Royal High School are particularly noticeable, specially when it is seen that the correlations between the class marks and class total does not differ much from that in other classes, and is substantial. The possible explanation may be that the Royal High School had a new teacher from New Zealand this year for geography, his teaching may be different from that in other schools and may have affected different boys differently.

The mean scores, and the standard deviation for each of classes are given below.

TEST MARKS.			CLASS MARKS.		CLASS TOTAL.	
	Mean Score.			Mean Score.		Mean Score.
3A <sub>1</sub>	9'600	61'363	10'953	69'424	61'363	664'273
3A <sub>3</sub>	12'595	57'323	16'05	61'688	100'11	616'688
3A <sub>2</sub>	68'485	65'065	7'335	66'516	62'00	636'758
3B	8'55	55'103	11'685	60'275	53'838	478'38

It will be noted that in Classes 3A<sub>1</sub>, and 3A<sub>3</sub> which are being taught geography by the same teacher, the mean score in class marks and in class total is higher in 3A<sub>1</sub>, than in 3A<sub>3</sub>, and



similar is the case with test marks.  $3A_2$  has done best in the test though it is next to  $3A_1$ , in other, the class is more homogeneous in geography as appears from the  $\sigma$  of the class marks.

The standard deviation has the biggest value in Class, 3A in all the three schools and it is to be noted that the correlations in the previous table are also the highest in 3A. The bigger the scatter of marks the lesser is the likelihood of interchange position in two different examinations and hence the possibility of higher correlation.

## D Correlations with I. Q

For the Royal High School correlations of I. Q with various sections of the test separately as also with their total, the class marks in geography and the class position have been worked out and are given in the Table below.

### I. Q

Test Score	$217 \pm 120$	Low
Total Score—map score	$306 \pm 116$	Substantial
Applied Geography	$420 \pm 105$	Do
Physical Geography	$271 \pm 119$	Low
General Geography	$090 \pm 127$	Practically nothing
Map Drawing	$019 \pm 123$	Nothing
Class Marks in Geography.	$048 \pm 130$	Do
Class Position	$396 \pm 110$	Substantial
Mean I. Q = 110.373	$\sigma$ of I. Q = 7.84	

"To possess any significance as evidence of correlation," a coefficient must be at least *twice as large as its "probable error"* (Burt 1917). If we take this as the criterion of a significant correlation we find from the above that intelligence correlates with all except with general geography and map drawing. It is rather strange to see that the correlation between intelligence and class marks in geography is nothing, although it correlates with the test score—247 (cf. 35, Burt's Correlation of Geography with intelligence and 367, Spearman's Correlation of Geometry with intelligence). The boosted correlation is 390.

The class position correlates well with intelligence (395) and no correlation with the classmarks in geography indicates

that there is something wrong with the class marks and probably this might explain the low correlation between Test Score and Class score in Geography.

Map Drawing has no correlation with intelligence and when we correlate (Test Score—Map Drawing Score) with intelligence we find correlation to have increased as compared with the correlation of intelligence with the Test Total Score.

As might be expected intelligence has the highest correlation with applied geography next with Physical Geography. It has very low (practically none) and no correlation with General Geography and Map drawing respectively.

The Mean I. Q. was 110.33 and the  $\sigma$  only 7.844 indicating that the group was highly selected. To remove the selectivity effect the correlation was boosted for the general distribution and the formula applied was:—

$$R = \frac{\Sigma_1}{\sigma_1} \frac{r^2}{\sqrt{1-r^2+r^2\left(\frac{\Sigma_1}{\sigma_1}\right)^2}}$$

Where  $R$  = correlation for selected population.

$r$  = correlation for the selected population.

$\Sigma$  = Standard deviation for the whole population.

$\sigma_1$  = Standard deviation for the selected population.

The results were:—

I.Q. Gen	= '147	I.Q. Map	= '031
I.Q. App	= '609	I.Q. Phy	= '423
I.Q. Total	= '390	I.Q. Class Position	= '575

It may be remarked that these results are not much to be relied upon as the intelligence test was given to twenty-nine pupils only, and out of these two were absent on the geography test day, so the correlations are based on the results of *twenty-seven* pupils only. This also explains the high probable errors.

### E. Inter-Correlations.

	General.	Applied.	Physical.	Map.	Average.
General	....	'348±'052	'441±'047	'317±'052	'369
Applied	'343±'052	....	'287±'054	'227±'056	'287
Physical	'441±'047	'237±'054	....	'327±'052	'352
Map	'317±'53	'227±'056	'327±'052	....	'290

All the correlations are significant and are comparable with correlations between the various aspects of language

	1	2	3	4	5
1 Composition		47	30	19	63
2 Dictation	47		18	25	28
3 Writing (quality)	30	18		22	36 (Burt, 1917)
4 Reading (speed)	49	25	22		37
5 Intelligence	63	28	36	37	

Also with Bradford's correlations between the same

	1	2	3	4
1 Composition		54	19	50
2 Spelling	44		22	44
3 Writing	19	22		19 (Burt, 1917).
4 Reading	50	44	19	

Also with Spearman's Correlation between arithmetic and geometry 249 (Spearman 1927)

It will be seen that general geography apparently correlates most with other aspects, next is physical, then map drawing and applied the least, yet when significant ratios are examined there is significant difference between correlation of general geography with physical and correlation of map drawing with applied geography as between them alone the significant ratio is greater than three, it is less

## F Correlations of the Total with the various Sections.

Various sections were correlated with the total of the test score to see how each individually agreed with the total, and findings were —

	General	Physical.	Applied	Map
Total	816±019	661±033	607±037	680±032

General geography correlates most and the others more or less equally. The fact that general geography has a greater proportion of marks in the test does not altogether account for the high correlation, for applied geography with the higher contribution of marks to the total (the mean score 15.17) has a lower correlation than map drawing with a lower contribution (mean score 8.44)

## G. Regression Equation.

Geography has always been regarded as a composite of physical geography, applied geography, general geography and map-drawing but these have not received any individual attention as requiring separate abilities. In the light of the above results, however, we find that while they contribute towards geographical knowledge, they also require specific and distinct abilities; which differ from each other and do not equally affect the geographical knowledge of an individual measured by an examination in these four. Some of them are more important than the others. It is necessary, therefore, to find the weights to be given to these measures so as to give the best prediction of geographical knowledge and this is done by finding the regression equation from the following matrix of correlation:—

Total.	General.	Physical.	Applied.	Map.
..	'82	'66	'61	'68
'82	..	'44	'35	'32
'66	'44	..	'29	'33
'61	'35	'29	..	'23
'68	'32	'33	'23	..

If  $Z$  represents the criterion (total) and  $Z_1, Z_2, Z_3, Z_4$ , the four abilities (General, Physical, Applied and Map). The Regression Equation is:—

$$Z = .497 Z_1 + .235 Z_2 + .282 Z_3 + .380 Z_4$$

And the Regression Coefficient comes out to be

$$R = .996.$$

The above weights which would give nearly perfect prediction are for the standardized scores, and to find these for the raw score we have to divide the deviations from the means by the respective and the new proportionate weights are:—

'88	'81	1'1	1'0
-----	-----	-----	-----

## V. Summary and Conclusion.

The problem selected was to investigate by statistical methods the inter-relation between physical geography, general geography, applied geography and map-drawing. The common four aspects of geography and then to determine the weights each should receive to give the best prediction of a knowledge of geography.

Since no existing test answered our purpose a new test was prepared

The test was given to 129 pupils and the results obtained were examined

The I Q correlated with the total test score and also with applied geography ( 420 105) and with physical geography ( 271 119) It has very low correlation with general geography ( 090 127), and none at all with map drawing ( 019 128)

The inter correlations between various sections of the test are all significant and *comparable to the correlations between various parts of a language* (Burt and Bradford)

The total correlates best with general geography and has nearly equal correlations with the other aspects These aspects while contributing to geographical knowledge require their specific abilities The Regression equation was calculated to give the best prediction and it came out to be—

$$Z = 497 Z_1 + 235 Z_2 + 282 Z_3 + 380 Z_4$$

As the test was not standardized the results cannot be treated as conclusive but since the number tested was well above 100 the findings may be said to have considerable validity, with the exception of the correlations with I Q's which are based on 27 cases only They at least point to a *field of further research* in this important branch of school curriculum

BALLARD	The New Examiner, (1st Cheap Edition)	1934
BURT	The Distribution and Relation of Educational Abilities	1917
SPEARMAN	The Abilities of Man	1927
WILSON AND HOKE	How to measure CURRICULUM	1931

## APPENDIX

### TESTS IN THE ORIGINAL FORM

#### A. Political Geography

1. In which of the following countries are prairies and in which pampas?

Russia, North America, China, Australia, Argentina, Germany.

Prairies .....

Pampas .....

2. In which of the following countries would you find: (a) Maories, (b) Pigmies, (c) Eskimos.

Central Africa, Australia, India, France, Egypt, New Zealand and West Indies.

Maories .....

Pigmies .....

Eskimos .....

3. Write one of the chief occupations of people in:

New Foundland .....

Johannesburg .....

The Black Country .....

4. What natural boundary separates:

Scotland from England.....

Ireland from Wales.....

France from Spain.....

5. Write against the name of the country its *chief* product among one of the followings:

Tobacco, Jute, Sugarcane, Wheat, Coffee, Grapes and Maize.

Bengal .....

Delta of Mississippi .....

Highlands of Brazil .....

6. Of the following countries which is to be regarded as the *chief* source of Tin, Rubber, Nitre:

Germany, Amazon Basin, India, Chile, Malay Peninsula and Mexico.

Silver .....

Rubber .....

Nitre .....

- 7 Name the country which governs

Malta . . .  
 Philippines . .  
 Formosa

- 8 Which part of Great Britain and Ireland export mostly

Cotton goods  
 Linen goods .  
 Jute goods .

- 9 What is the general direction of the following rivers and mountains?

State E. W. or N. S.

Mississippi .  
 Himalayas .  
 Andes .

- 10 Name the capital and one large port of

	Capital	Port
Peru		. .
Australia .		. .
Egypt .		. .

- 11 In each of the following pairs underline the one which you think to be more industrial

Delhi and Calcutta.  
 Southern Uplands and Scottish Lowlands  
 Chilian Desert and Chilian Uplands

- 12 Which of the following facts are characteristics of the places mentioned below

Fog, Sugar Plantations, Gold Mining, Diamond Digging,  
 Volcanoes  
 Kimberley  
 London  
 Mauritius . . .

- 13 New Zealand is called the Great Britain of the Southern Hemisphere because

- (a) It is under British Possession  
 (b) Its climate and position are very similar to that of Great Britain  
 (c) It is to the east of Australia

Which is the chief reason? Answer simply (a), (b), (c)

14. Africa is called the Dark Continent for

- (a) Its nights are very dark.
- (b) Its forests are very thick and dark.
- (c) It is not yet explored fully.

Which is the chief reason? Answer (a) or (b) or (c).

15. Which of the following words give the main reason for the fact that the countries named below are not fully explored.

Vast desert, inaccessible mountains, impenetrable forests, intense cold, fierce inhabitants.

Sahara .....

Amazon Basin .....

Tibet .....

16. Of the following pairs, underline the one which you think to be the cooler.

Norway .. Sweden.

Sanfrancisco .. Quebec.

Durban .. Pretoria.

17. Of the following pairs underline the one which you think to be cooler.

West Japan .. East Japan.

Bengal .. The Punjab.

Glasgow .. Edinburgh.

#### B. *Physical Geography.*

1. Which is generally the wettest month in:—

(a) Western Ghats .....

(b) South-west corner of Africa .....

(c) Amazon Basin .....

2. Which of the two places will be considered drier with 30" Annual rainfall, Edinburgh or New Orleans?

3. What sort of days will you generally find in Kenya in July and April, state only whether sunny, cloudy, misty or cold?

July .....

April .....



- 4 Which of the following countries have extreme climate and which equable  
 Great Britain, Sahara, Tundra, Central Africa  
 Extreme  
 Equable
- 5 What is the direction of prevailing winds in summer over Scotland, Indian Ocean and South Chile?  
 State whether W, N W, S W, E, or S  
 Scotland  
 Indian Ocean  
 South Chile
- 6 Underline the planet which will have the longest year  
 Venus, Mars, Earth and Jupiter
- 7 Put a cross against the reason which you think to be true  
 The Midnight sun is so called because—  
 (a) It rises at the end of night.  
 (b) It sets at the mid of night  
 (c) It does not set at all and can be seen at the mid of night
- 8 An Earthquake is caused because —  
 (a) The place is near the equator  
 (b) There are landslips on the mountains  
 (c) There are sudden internal changes in the earth
- 9 Fishing is carried on in New Foundland because —  
 (a) It is always foggy  
 (b) People eat fish  
 (c) Hot and cold currents meet  
 (d) It is shallow water
- 10 What sort of current hot or cold flows along —  
 (a) East of Labrador  
 (b) West of Great Britain  
 (c) East of Brazil
- 11 Examine the following facts, write against each "true" if you think it to be true and "false" if you think it to be false  
 (a) It is Solar eclipse when the earth is between the Sun and the Moon  
 (b) It is Lunar eclipse if the Shadow of earth falls on the Moon  
 (c) It is Spring Tide when the water rises lowest

12. State where the snowline will be highest and where lowest.

Himalayas, Alps, Scandinavians and Andes near the Equator.

Highest .....

Lowest .....

13. State whether the pressure would be low or high over:—

(a) Equator .....

(b) Deserts in day time .....

(c) High mountains .....

14. State whether the temperature would be low or high over:—

(a) Polar regions .....

(b) Deserts in the night .....

(c) Equator .....

15. State what effect would it produce in the length of days and nights over Great Britain if the axis of the earth were:—

(i) Not inclined .....

(ii) Inclined at  $80^{\circ}$  .....

Write (a) If the days and nights would be equal.

(b) If the days and nights would be longer or shorter than what they are.

(c) If there would be no change.

### C. *Applied Geography.*

Put a cross against the geographical reason which you think to be correct.

1. People in Tundras put on Furs because:—

(a) It is intensely cold there.

(b) It is so smooth and soft to touch.

(c) It is costly and a symbol of wealth.

2. Windows in Calcutta face towards the south because:—

(a) The Ganges flows to the South.

(b) They consider it sacred.

(c) The winds come from the south.

3. There are chimneys on the roofs of the houses in Scotland because:—

(a) They are considered fashionable.

(b) They carry away smoke.

(c) They indicate the industrial nature of the town.

4. Japanese live in houses made of wood and paper because:—

(a) They are fond of paper.

(b) Wood is cheap.

(c) Earthquakes frequently come.

- 5 People in Japan are sleeping at this time because —  
(a) They are fond of sleep  
(b) It is in the far East  
(c) They can't wake up long
- 6 Australians do not put on warm clothing in December because —  
(a) The sun is in the South  
(b) All wool is exported  
(c) They like cotton clothes.
- 7 Suez Canal has increased the trade between east and west because:—  
(a) It has shortened the distance  
(b) It has disunited Africa and Asia  
(c) It is near the chief highway of ships
- 8 Cotton is woven in Manchester because —  
(a) It has a moist climate  
(b) It is near Liverpool, the largest port in the West  
(c) It has got Cotton Mills
- 9 Switzerland has numerous small industries without iron and coal because —  
(a) Swiss are very industrial people  
(b) Water power is cheap  
(c) All industries do not require iron and coal
- 10 People do not dare fly straight from Morocco to Cape Town because —  
(a) It is a very long distance.  
(b) It crosses over thick forests  
(c) It crosses over a vast waterless desert.
- 11 India was invaded through the north west, because —  
(a) The people in the north west were stronger  
(b) India was rich  
(c) There were passes in her N W Frontier
- 12 England did not have so many continental wars as France and Austria, because —  
(a) It had no desire to expand its territories  
(b) It was an Island  
(c) It had other things to look after

13. The desert is considered to be the richest part of Chile, because:—  
(a) The sands sparkle like gold.  
(b) The other parts are poor.  
(c) There are nitre deposits in the desert.
14. People in East Indies live in houses built on logs because:—  
(a) The islands are boggy.  
(b) The logs are abundant.  
(c) They wish to live as high as possible.
15. Abyssinians are waiting quietly for the advance of Italians into their interior, because:—  
(a) They hope to be better armed by them.  
(b) The country in the interior is rugged.  
(c) They hope to surround them on all sides.
16. Greeks had strong navy, where India had none, because:—  
(a) Greeks were better sailors.  
(b) Indians had no enemies.  
(c) Greece had numerous islands near about.
17. People from North Europe go to Riviera in winter, because:—  
(a) They feel more active to travel.  
(b) They have long Christmas holidays.  
(c) Riviera is warmer.
18. Calcutta is in the western end of the Delta, because:—  
(a) The Gangetic plain spreads to the west.  
(b) The Delta is expanding to the east.  
(c) The Hugli is the western-most branch of the Ganges at the Delta.

D. Map Drawing.

26211

1. Draw a diagram of the Globe showing the zones.
  2. Illustrate either Solar or Lunar eclipse by a diagram.
  3. Illustrate by a diagram the importance of Southampton, Chicago, and Singapore by means of sketches.
  4. Draw figures to illustrate:—  
A Pass, a Peninsula, a Straight and a Cape.
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